

MOVEMENT AS A GENERATOR FOR TRANSIENT ARCHITECTURE:

Towards a design of a transport interchange in South Durban

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DECLARATION - PLAGIARISM

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Signed

.....

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And finally, **my family** thank you for your unconditional love and support during this process. I know it was just as tough on you as it was on me.

DEDICATION

This dissertation is dedicated to the victims of Pedestrian- Vehicle Accidents and their families and loved ones.

ABSTRACT

The theories of liminality, urban mobility, critical geography and spatialized critical theory are analyzed through a phenomenological enquiry attempting to understand the way people perceive place as they move and transform through space and time.

The concept of using movement as an informer for design has not been adequately employed in contemporary society, resulting in movement through spaces not being sustainable. Therefore, the infrastructure facilitating this movement does not respond in a dynamic and flexible way, resulting in harsh boundaries, discontinued urban node patterns and, most imperative to the discussion, marginalization on a global scale.

Isipingo is one of many marginalized communities in South Africa, also considered a third space of resistance. Development, however, is focused on efficiency of freight transportation rather than enhancing the vibrancy and dynamics of multifarious networks that have had the opportunity to develop organically and spontaneously, forming a 'melting pot of cultures,' (Makhathini, 2011).

These imperative survival networks can be enhanced through infrastructure which allows for choice, giving people the freedom to transform through space and time. Transient architecture, informed by movement and connections between people, can then adapt as these motions change over time, accepting a multiplicity of cultures and dynamics in a space simultaneously.

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PART ONE

BACKGROUND RESEARCH ON ISSUES

CHAPTER 1

INTRODUCTION

*'i'm also located in the margin, in a footnote, an endnote,
between the lines, between words and bodies,
crossing the line, in between the lines,
at a point, at a spot, at a site...
at an open space, a site, specific site, at a location,
at a place, space, place, spaced place, sense of place.
displace.
in, out, out in, in/out in,
going, coming, going, staying, going, going, going...
staying... stop.
please, stop.'*

(Ana Luz, "between nowhere", 2004)

1.1 INTRODUCTION

1.1.1 Background

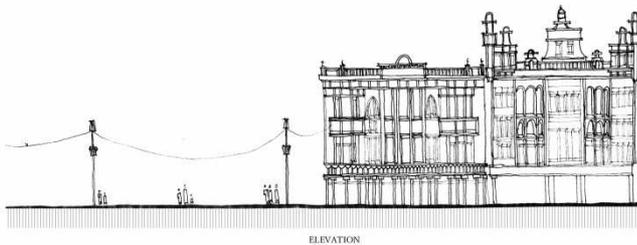
As a result of technological advancements, cities have had the opportunity to expand and grow exponentially. “For centuries all towns and cities were pedestrian,” (Lemberg, 1977:1) but they are now dominated and manipulated by vehicular movement and transport infrastructure. These transient spaces, which used to be the centre of human interaction, have now become boundaries imposed on society through developments which are only driven by political and economic sectors purely for individual profit (Lemberg, 1977).

In South Durban these spaces are forming harsh boundaries between marginalized townships and places of work, reflecting apartheid's zoning plan (Scott, 2003). The dependence on private automobiles has resulted in an underutilized railway which has become a ‘dead’ and potentially dangerous space, and an unscaled highway which is not conducive to pedestrian movement.

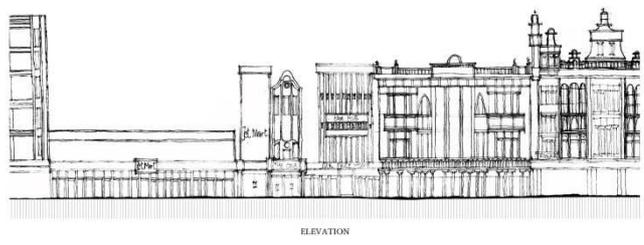
The decline of the public transportation system has coincided with the increasing dependency on privatised vehicles. In the past, rudimentary public transportation services were only provided in low- income areas (CSIR, 2000). These services were about profit and not people and very little was provided for non- work purposes. Middle to high income areas had no choice but to rely on privatised transportation (CSIR, 2000).

The aim of the research is to identify movement as a generator for transient architecture and integrate these movement networks with public transportation. These movement networks include pedestrians and users of non- motorised transportation. It taps into an existing idea of using a “corridor city” (CSIR, 2000) as an appropriate solution to facilitate integration in South Africa as it fits with the existing land- tenure patterns and the concept of multi- nodal cities (Godehart & Pernegger, 2007).

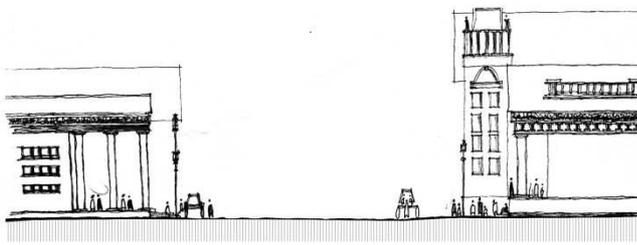
Transportation development is identified as a fundamental and interdependent part of urban development and cannot be planned and evaluated independently of the physical and social environment (Lemberg, 1977). The research will attempt to refocus design and spatial planning towards pedestrian movement and public transportation.



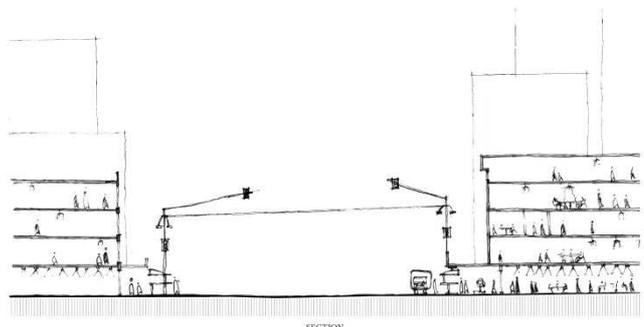
ELEVATION



ELEVATION



SECTION



SECTION

Figure 1.1: 1920 Elevation and Section of West Steet. Source: Sketch by Tomi Oyedej

Figure 1.2: 2015 Elevation and Section of West Steet. Source: Sketch by Tomi Oyedej

1.1.2 Motivation/Justification of the study

There is a large gap in the literature between the practical implications of transport structures and their theoretical conceptions. There is little thought given to how these structures are perceived by pedestrians and how they affect spatial development. As a result of this, transport infrastructure has been analysed as a fixed system with no attention given to transitional dynamic problems and the system's need to change over time, as well as the idea of planning for the general 'public interest' (Lemberg, 1977), which excludes a number of classes. This has resulted in public transportation becoming an underutilized resource.

In South Africa, transportation infrastructure has always been designed for efficiency and not for equality, and this has done little to facilitate integration in post-apartheid South Africa. The lack of transport links between townships and economic nodes has resulted in overcrowding around these nodes as well as these communities losing impetus for self-improvement as the residents disperse in search for better lifestyles (Godehart & Pernegger, 2007).

The research will aim to understand how transport infrastructure is perceived and utilized by pedestrians and users of non- motorised transport. Transportation development and land use will be analysed as interdependent concepts with the idea of designing a transport interchange in Isipingo generated by the movement networks of the people. This will increase the potential transfer between routes and different modes of transport, facilitating integration by allowing for movement to become flexible and equal and not something which takes place in a 'closed roadway' (CSIR et al, 2000).

1.2 DEFINITION OF THE PROBLEM, AIMS AND OBJECTIVES

1.2.1 Definition of the Problem

The concept of using movement as an informer of design has not been adequately employed, resulting in movement through spaces not being sustainable. Therefore, the infrastructure facilitating this movement does not respond in a dynamic and flexible way, resulting in harsh boundaries and discontinued urban node patterns. As cities and technology rapidly advances and changes, networks connecting people and places together become increasingly complex. This is resulting in a universal world characterized by segregation and is especially relevant in a South African context because of its historical background.

1.2.2 Aim

Identification and exploration of movement as a generator for architecture

1.2.3 Objectives

- Investigate how movement has developed throughout history
- Understand how the development of transitional spaces have affected communities
- Understand the pedestrian's perception of roadways and public transportation
- Reimagine the public transport system in South Durban
- Inform a transient architecture to redefine the purpose of public networks to facilitate integration

1.3 SETTING OUT THE SCOPE

1.3.1 Delimitation of Research Problem

Making initial contact and getting valuable information from the people who are in a state of nomadism. The participants may not want to or have the time to pause for interviews or to engage in conversation.

Another issue is that the participants will come from a wide range of backgrounds and cultures, which will affect the way they perceive their environment. This could complicate the feedback as it would not be consistent.

1.3.2 Definition of Terms

- Transient: an adjective describing a momentary and impermanent experience through space. Specifically pertaining to architecture it refers to the dynamics and adaptability of a structure to be able to transform over time.
- Integration: a verb referring to a multiplicity of variables utilizing one space in which a constant negotiation of differences takes place. It is not the assimilation of one variable into another.
- Man: the term for a human being of either sex
- Heterotopia: a concept describing a space of non-hegemonic qualities which enables the co- existence of different variables
- Antispace: a concept describing a space violating societies ideals, left over or formed from unsustainable development
- Hybridity: a theory regarding interaction between two or more different cultures.

1.3.3 Stating the Assumptions

It can be assumed that the participants will be adults and of a low- middle income working class, however, there is a possibility that children travelling between school and home will be encountered.

1.3.4 Key Questions

- Why would movement be a generator of architecture?
- How has movement developed throughout history?
- Who is affected by the development of transitional spaces?
- What is the pedestrians' perception of roadways and public transportation?
- What role can architecture play in redefining the purpose of public networks?

- How will a transport interchange in affect the public transport system in South Durban?
- Who is the public transport interchange being designed for?

1.3.5 Hypothesis

Movement is a generator of transient architecture which can be used to facilitate integration of various cultural groups, socio- economic classes and modes of transport in South Durban.

1.4 CONCEPTS AND THEORIES/LITERATURE REVIEW

1.4.1 Liminality as a Tool for Analysing Movement

Movement is a powerful shaper of space. Spaces are constantly changing to suit the needs of people. Theoretically these are liminal spaces, highlighting the complex dynamics of urban life (Luz, 2014). The concept of utilizing the idea of liminality as a tool for understanding urban mobility will be employed through Arnold van Gennep's theories on spaces of unlimited freedom (Thomassen, Wydra, Horvath, 2013). George Simmel defines urban mobility through understanding urbanism as a human event (Luz, 2014), in which an individual's ever changing social and spatial position changes as one moves through a city. This sense of transition is how one experiences culture and

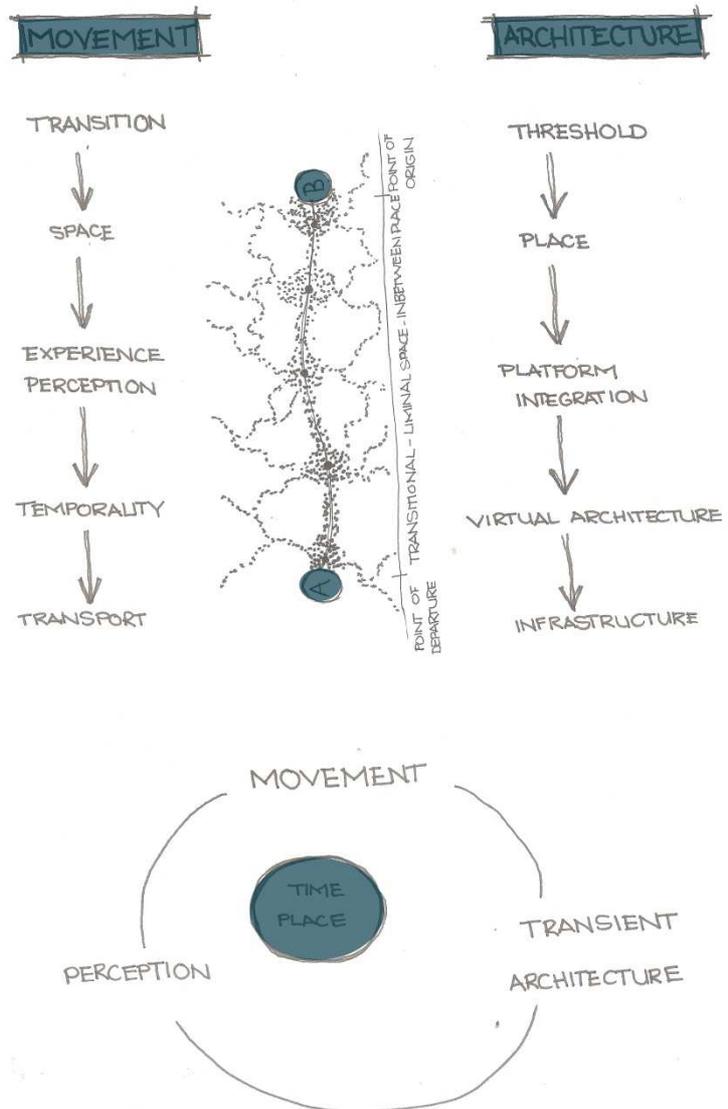


Figure 1.3: Summary of concepts and theories. Source: Graphic by Author

society, and liminality can be used as a tool to analyse the meaning of this movement and the way people experience and react to change during moments of transition.

The research will focus on contemporary mobility; how its rapid development affects peoples experience and perception of space and time. As the act of walking changed to locomotion liminal experiences are being increasingly diminished. 'Contemporary mobility is now creating continuous spaces for exchange, shifting the philosophical and built environment discourses from the fixed spaces of staying, (building and edifices), to a new perspective regarding the 'spaces of going'- the spaces of passage, nomadism, transition and circulation,' (Luz, 2004: 145).

1.4.2 The Experience and Shaping of Space

Phenomenology, analysed through the theories of Norberg Schultz and Martin Heidegger, is how one reacts to and experiences space, (Schultz, 1993). Henri Bergson (1912) visualises reality as an endless process of becoming, (Matthews, 2005), meaning that our experience with space and the built environment is continuously influencing people and is profoundly pedagogical, (Gruenewald, 2003). Michael Foucault (1999), David Harvey (2010) and Edward Soja (2000) theorise how spatial relationships shape culture, identity and social relations through critical geography, however, most imperative to this discussion is Henri Lefebvre's (1991) urban theory. Our experience with transient spaces, which are being rapidly altered in today's society, is not necessarily sustainable or facilitating true integration (Luz, 2004). There is a gap in their theoretical conception and how they are realistically implemented and influenced by technology.

1.4.3 Transient Architecture as a Platform for Integration

Homi Bhabha's (1994) concept of Third Spaces can be used to identify and describe liminal space in urban society. It is a positive paradigm in which hybrid cultures are formed, (Thomassen, 2014), which encompasses a feminist resistance against rigid institutional structures and presents the opportunity for radical thinking and multiculturalism, (Gruenewald, 2003). Spatialized critical theory, recognizing cultural production as the organisation and unconscious experience of space, (Gruenewald, 2003: 628), has the ability to analyse experiences from different cultures and communities, such as that of the marginalized, and can show radical possibilities for change and resistance against neoliberal society and privatisation.

Architecture has the ability to define these Third Spaces and understand the relationship between space and time by becoming a never ending process. Oceanic Architecture argues the validity of using sites for monumentality when it could be utilised for performance, a never- ending spectacle defined by people's daily habits and movement (Yates, 2012). Influenced by the Samoan boat construction, structures continually redefine the boundaries between the landscape and the interior, using materials that highlight the temporal characteristics of architecture. The temporal environment should be 'thoroughly imbricated with the technologies, mythologies and aesthetics of movement,' (Austin, 2004: 227 in Grant, McNeilly and Veerapen, 2015). John van Neumann's (1944) Game Theory is using technology to anticipate and plan for changes, (Matthews, 2005). Cedric Price (1984) combines this concept with architecture to create a virtual reality and sustainable spaces. 'Virtual Architecture would similarly be flexible and capable of emulating the behaviour of different buildings' (Matthews, 2005: 41).

Through an improvisational architecture which has the ability to respond to situations in a temporal, dynamic and adaptable way, a platform for true integration can be established by using movement as a generator for its design.

1.5 RESEARCH METHODS AND MATERIALS

1.5.1 Research Methods

The approach to this study is qualitative exploratory and based on phenomenological enquiry, where the research aims to understand how the movement of people can be used to generate architecture. It is focused specifically around investigating how infrastructure for movement is perceived by pedestrians and users of non- motorised transport, to inform the design of spaces which can facilitate and adapt to a wider range of movement networks.

The research is around an instrumental case study within the area of South Durban, where there is existing conflict between vehicular and pedestrian movement. The reason for this choice of case study is the research's purpose to inform a new architecture by understanding and interpreting the existing conditions and occurrences surrounding transport infrastructure, re- integrating these spaces into the public realm. The boundaries of this case study lie within the parameters of people in motion, who have to cross or come into contact with transport infrastructure while travelling between

home and work. This will form an understanding of how this infrastructure is perceived from the pedestrians view point.

Sampling Method: Diversity and Snowball Sampling: To be aware of all conflicts surrounding transport development in South Durban, data needs to be collected from various groups to allow for an overall perspective of the situation and not from only one party. By looking at multiple perspectives of the same situation, a generalisation of what something is like from the 'insiders' experience can be made. The sample will be restricted to any person relying on public transportation and roadway infrastructure to move through Durban.

A Snowballing Method will also be undertaken as from these networks further connections may be established that weren't recognized at the initial undertaking of the research. All anonymity will be kept the use of pseudonyms where necessary as discussed with sample. The saturation point will be decided once enough information is gained from a variety of samples to adequately understand the nature and needs of these people travelling daily along these movement networks.

Data Collection: Interviews and Observations: This research needs to understand the experiences and perceptions (emotional characteristics) and immediate social responsivity, spontaneous and unpredictable behaviours (naturalistic characteristics) of the people travelling along these movement networks, giving two clear areas of focus in the data collection; first a series of semi- structured interviews with the people moving through or working in Isipingo will be conducted through an NGO in Warwick Junction. Interview Questions will be kept open ended and will not only enquire about the participants perception of roadway infrastructure and transportation, but also the background and culture of the participant as this will affect how an individual perceives their space.

Further passive and participatory observations will be conducted while people are travelling along these routes, to empathise with how pedestrians in this area engage with existing transport infrastructure.

Secondary Data Collection:

Information obtained by examining various media by different authors gathered through reviewing books, journal articles and academic papers written by various authors; videos/ movies, television broadcast and the World Wide Web; raw data from precedent and case studies, interviews with professionals involved in the IRPTN plans for eThekweni Municipality etc.

Data Analysis: The data collected will be familiarized and inductive general codes and themes generated from this. All the data collected will then be broken down according to the themes identified, where it can then be interpreted to best inform the design of a transport interchange.

Validity, Reliability and Rigour: The study aims to underpin a language/ discussion for the role of architecture in the facilitation of movement networks using a specific case study where there is a growing call for an alternate uses of transport modes. Findings through this study will be limited to the particular environment and context. However the intent is that this study will through its implementation evoke discussions on the future design of transport infrastructure and its reintegration into the public realm and public life. Further, it intends to evoke discussion surrounding the current developments of public transportation and question whether it is being designed for profit and efficiency or for people and equality.

The first step of the research is to build an understanding of how movement and transportation developed overtime, globally and locally, and how this affected spatial development and land use, through the exploration of historical literature. The next stage is to gain an understanding of the perceptions of the pedestrians and users of non- motorised transport who come into direct contact with infrastructure designed to facilitate movement and transport. It would need to further explore how these people view and treat these spaces and how their daily lives are affected through its design. This would begin a discussion around the needs of the people moving through these transient spaces. Finally it would start to look at the architectural profession, to reimagine the design of transport infrastructure which would better suit the needs of the people and a transport interchange to facilitate integration between different cultures, classes and modes of transport.

Accuracy of data collection is critical and three steps would be undertaken to ensure the process yields reliable and accurate information. Firstly the structure of the interview is a logical progression of information that builds on the information received from the sample, allowing for constant cross checking of responses based on the general outlook of the sample and their responses. Secondly, leader questions that are guided by the expected responses to the main questions will allow the researcher to pick up on abnormalities during the interview and also ensure that the researcher will get accurate information from each question where the sample may not completely or clearly answer the initial question. Finally observations will complement the interviews

allowing the researcher to observe first-hand the accuracy of information collected from these interviews.

The research is aimed at understanding the pedestrians perception of transport infrastructure as these experiences can be used to discern people's needs and inform an architecture which will adequately cater for these needs.

1.5.2 Research Materials

Research materials will consist of a researcher's notebook for recording observations and a voice recorder and/ or camera for verbal interviews.

1.6 CONCLUSION

Movement is a concept which has not been utilized to its full potential in design. Its very definition in contemporary society is superficial and meaningless, resulting in unsustainable transient spaces. Cities globally are developing in an unsustainable manner through technological influences and rapidly changing society as a result of increased mobility designed for efficiency. This is reflected throughout post- apartheid South Africa, in which the planning of these transient spaces has not contributed to facilitating integration.

There is a large gap in the theoretical conception of how people move through and experience these spaces and how the infrastructure to facilitate this movement and experience is actually implemented. There is also a large gap in the literature into how these spaces are currently affecting and influencing social and spatial relations.

The main objective of the dissertation is to investigate how the concept of movement is an informer for sustainable and egalitarian design. South Durban is a perfect example of how transient spaces can impact a community, and there is an opportunity to reimagine how these spaces can be used not just as linkage spaces, but become liminal spaces for free participation, expression and change (Gibson, 2008).

CHAPTER 2

LIMINALITY: THE EXPERIENCE OF MOVEMENT

“Henceforth, space alone or time alone is doomed to fade into mere shadow; only a kind of union of both will preserve their existence.”

(Hermann Minkowski in Giedion, 1943: 364)

2.1 INTRODUCTION

The Literature Review is divided into three chapters, in a 'rhizomatic' structure, moving backward and forward in the chronological history and development of movement, and constantly jumping between geographical and disciplinary contexts where scholarship on this concept has developed, in order to gather an understanding for its connections and relevance across space and time. An intertextual analysis is produced in order to re- assess the idea of movement in contemporary society and its relevance in architectural practice.



Figure 2.1: Liso Lozano's Urban Interventions, highlighting spaces in urban settings that are unnoticed by society, altering perceptions. Source: lisalozano.com

The spaces that people move through and develop in are becoming increasingly relevant in contemporary society (Luz, 2004:145). This increase in mobility, especially in urban areas, can be contested to rapid advancement in technology and globalisation (Lemberg, 1977). One of the most critical influencers on society's movements and transformations are the spaces which accommodate changes. These are transient spaces, in- between spaces, forming links between the place of departure and the place of going (Luz, 2004).

The design and adaptability of these spaces is the focus of this dissertation.

The concept of liminality and surrounding theories are analysed in order to understand movement across space and time in the urban environment. Henri Bergson (1912) and Sigfried Giedion (1943) both theorise about movement in its metaphysical state and how transformation connecting space and time is a never ending process.

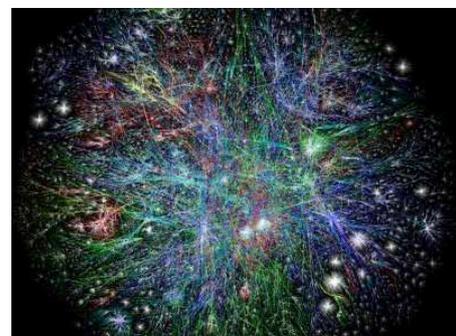


Figure 2.2: The Opte Project, a visual representation of cyber connections across the globe representing the interconnectedness and movement of contemporary society. Source: www.opte.org

The location of these spaces and their heterotopia characteristics are identified through the work of Michael Foucault (1999). These perceptions of transformation vary according to where an individual is placed in society. Martin Heidegger's (1971) theory of 'being' and 'nearness' as well as Henri Lefebvre's (1991) notions on urban mobility enable an understanding of how and where these transformations take place and the effect on development throughout history.

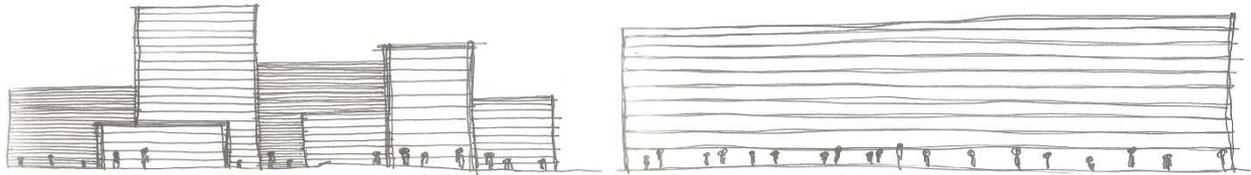


Figure 2.3: Sketch illustrating Heidegger's concept of 'nearness', illustrating how a many textured universe is characterised by near and far distances, changing man's position as he moves through space and time. Source: Sketch by Author, 2016

David Harvey (2010) enables us to connect these metaphysical notions with reality by highlighting the effects of industrial capitalism. The effects of technology are shortening the distances of space and time, creating a monotonous, uniform universe where men are subordinated into society and their position depends on what category they are confined.

Identifying these affects enables an understanding of unshaped urban spaces in contemporary society, an understanding leading to reclamation of space.

2.2 LIMINALITY AND TRANSITIONAL SPACE

2.2.1 Introduction

Society is constantly undergoing changes, forming mobile spaces of uncertainties. These transient spaces accommodate a shifting sense of time and place. However, the design of these spaces often restricts urban mobility and an emotional connection with surroundings.

2.2.2 Movement, Space and Time

According to Henri Bergson (1912) reality is a never- ending process of movement through time and space. People's experiences with the built environment are in a continuous state of movement and transition as 'the "real" can never become completely fixed,' (Lefebvre, 1991: 215). The notion of time, conceptualised in isolation for centuries, is particularly relevant in today's society as there is a shift in philosophical and built environment discourse from static, iconic places to the spaces of mobility (Luz, 2004: 145).

These transient spaces create opportunities for transformation, bringing about a resurgence of modernisms intended ideals; ‘change and movement, speeding up, dissolving and transforming everything at hand,’ (Koselleck 1979; Wagner 2008; Giesen 2009 in Thomassen, 2014: 9).

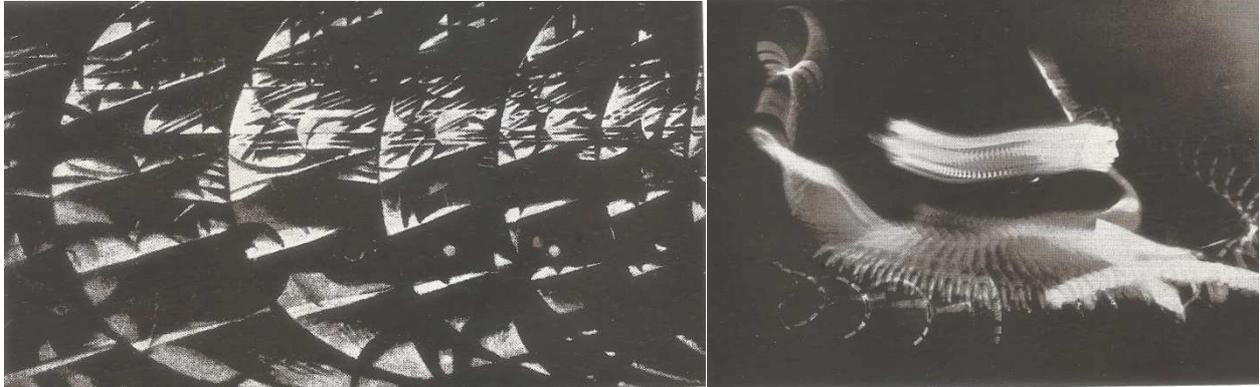


Figure 2.4: Right- Balla, Speed, 1913. Left- Edgerton, Speed Photograph of a tennis player, 1939 Source: Giedion, 1943: 367

The 20th century arrived with rapid advancement in technological innovations, speeding up mobility and causing radical change in society. The economic, social and functional influences remained imperative; however, the arts became exiled into their own realm, divorced from everyday reality.

Arts play an important role forming an emotional connection with space and time, but these notions are often dismissed as trivial (Giedion, 1943: 350), resulting in development continuing exempt from these factors. Ignoring this aspect in life is detrimental to how individuals and communities move and evolve through space and time.

As experiences with space and time became harder to quantify, cubism developed as an expression of the collective in order to form a unity between the two (Giedion, 1943: 364) by perceiving objects from different points, simultaneously through three dimensional space. The movement lead to a self- conscious enlargement for perception of spaces (Giedion, 1943: 357) and highlights the notion, recognized by both realms of art and science, that one cannot truly experience a space until one moves through it (Giedion, 1943).

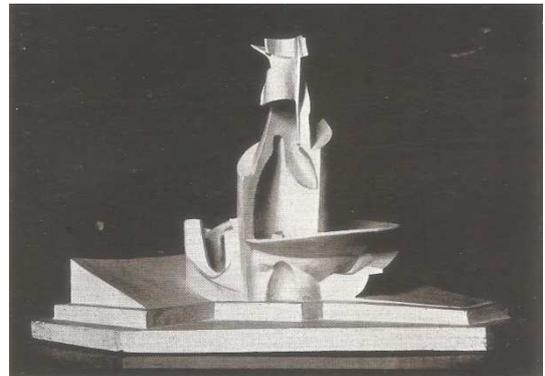


Figure 2.5: Boccione, Bottle Evolving in Space, 1911-12. An artwork representing the futurist movement of capturing objects in motion, multiplying and distorting as they move through space (Technical Manifesto and Futurist Painting, 1912 in Giedion, 1943: 365). Source: Giedion, 1943:

Movement through space and time has become an obsession amongst all professions alike, specifically the representation of it. This representation was sought in order to find meanings for spatial conceptions in a world characterised by contemporary mobility (Giedion, 1943).

‘Scientists know today that all life has historical connections through time’ (Knapp, 2003 in FOA, 2003: 638) and experiencing life is not confined to any specific point or place, but is defined by continuous connections and transformations across space and time. There is a demand for continuity as ‘human life is not limited to the period of a single life span,’ (Giedion, 1943: 7 in Norberg- Schultz, 1980: 201).



Figure 2.6: Nude Descending a Staircase, Marcel Duchamp, View from Multiple Points of Perspective, Source: <http://en.wikipedia.org>

2.2.3 Liminal Moments in Urban Spaces

Liminality is a concept used to understand moments of transition, how they affect individuals and how one reacts to change (Thomassen, Wydra & Horvath, 2015). Arnold van Gennep (1909), Richard Turner (1967) and Eric Voeglin (1987) are the main contributors to its theoretical discourse and in the understanding of how these moments



Figure 2.7: Khronos Projector. Representing time through film. Source: <http://www.k2.t.u-tokyo.ac.jp>



Figure 2.8: Picasso, “Guernica”, 1937. Source: <http://www.pablocpicasso.com>

mark society (Thomassen, 2014).

In contemporary society where mobility and transition are becoming necessary for survival, liminal conditions become more evident; places of no limits or boundaries, encompassing infinite possibilities (Thomassen, 2014: 1).

These conditions are often seen as necessary in order for people to move and evolve, for the construction of culture and for sustaining social reality, however, they are imploding as the boundary between the ordinary and extra- ordinary becomes porous (Thomassen, 2014: 2). This can be dedicated to rapid advancement in technology, contemporary culture and capitalism, however, such relations are 'as noted by Weber, a recurring phenomenon in historical moments of crises,' (Thomassen, 2014: 2).

Therefore, these moments have always existed throughout time and will continue to do so, and it is in these spaces that negotiation of transformation will take place as order is henceforth forgotten (Voeglin, 1987), forming grounds for new social orders.



Figure 2.9: Aftermath of war in Berlin, a critical liminal moment in German Society, illustrating how liminality 'is likewise about how larger groups or entire societies undergo change and transition, how they live through uncertainties of the in- between, and how they come out on the other side- if at all,' (Thomassen, 2014: 1). Source: <http://theelephantgate.weebly.com>

2.2.4 The Location of Nomadism across Time

One of the most critical influencers on movement is the spaces accommodating for change. Transient spaces, forming links between places of departure and places of going (Luz 2004), are constantly changing and evolving to suit the needs of the people. The location of nomadism can be found in three main areas in urban society; Liminal spaces of transition- threshold spaces which allow for the crossing over from one place to the next- spaces between buildings- “leftover” spaces which become lost, degraded and empty- and transitional localities- places of communication, transportation and non-place (Luz, 2004).

Michael Foucault (1999) theorizes about these spaces being heterotopias accommodating the dynamic of time and place (Luz, 2004); Momentary spaced places affiliated with both the points of departure and points of origin (Foucault in Luz, 2004). They are places in which mobile activities can be carried out unconsciously, characterised by hybridity, interlocking and exchange, devoid of hierarchy or social status and ‘imply a certain trace of anonymity, traffic and people who circulate in continuity,’ (Luz, 2004: 9).

Victor Turner (1967) visualises “liminoid” spaces being created from a particular event or from resistance against ordering (Hetherington, 1997: 34).

In terms of architectural spaces, they can be defined as third spaces or ‘in- between’ spaces (Luz, 2004). These spaces can be translated into places that people pass through but do not live in, such as airports, hotels, passageways, railways etc.; Passage experiences indicating ‘a displacement, a process of transformation undertaken, but not yet finished,’ (La Soudiere, 2000: 5 in Thomassen, 2014: 13).

The location of these public spaces is established when the boundary line is crossed, overcome and experienced forming a space in-between the boundaries, reflecting the complex dynamics of urban life (Luz, 2004). As society



Figure 2.10: Art Work by Natalie Couch depicting transformation through space. Source: <http://www.xsectionjournal>



Figure 2.11: Train tracks ascending the Jacobs Ladder to the South Coast Junction. Source: <http://grahamlesliemacallum.wordpress.com>

evolves and moves forward, so too must these spaces. If not it becomes lost; unshaped anti- space as a result of poor urban design (Trancik, 1986). Movement over time will always result in unused land and if left, the infrastructure of these spaces results in major gaps disrupting the overall continuity of the urban fabric.

2.2.5 Dynamics of Urban Life

Georg Simmel (1990) defines urban mobility through understanding urbanism as a human event, recognizing the individual's ever changing social and spatial position as one moves through a city. This sense of transition is how one experiences culture and society, but as the act of walking changed to locomotion these liminal experiences became increasingly diminished, disabling man from understanding his place in the natural



Figure 2.12: Venezuela Capital, Caracas, illustrating the harsh boundaries formed by transport infrastructure, restricting people's movement and disabling self-emancipation from liminal experiences (Murrugarra, Larrison & Sasin, 2011). Source: <http://www.sunnysidebaptistchurch.org>

world

'Travel is no longer an event, but a routine,' (FOA, 2003: 112). This contradicts Simmel's notion of movement as a performance. Urban mobility has instead been incorporated into everyday life, reduced to an unconscious act that has not been intensely problematized.

The design of the spaces facilitating urban mobility is assumed and imposed through a minority who do not participate in the motion of everyday life (Murrugarra, Larrison and Sasin, 2011), which is why these liminal spaces are being diminished through urban scenarios still filled with the remains of the past (Luz, 2014: 12).

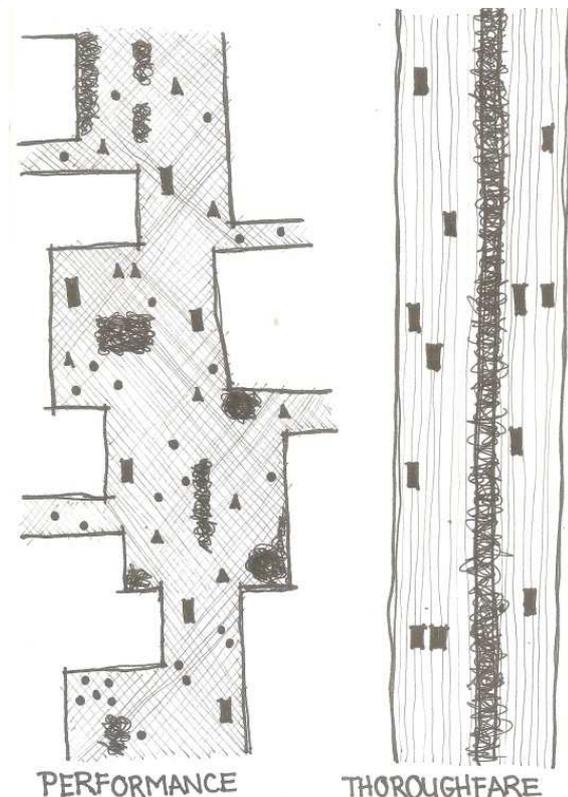


Figure 2.13: Sketch depicting the differences between thoroughfares and places of performance and pause. Source: Sketch by Author, 2016

A passage place was selected as a site for an urban intervention; the public entrance of an art school in London. The objective of the design was to reuse and appropriate urban details to draw attention to the passageway to understand the pedestrians' immediate social responsivity, spontaneous and unpredictable behaviours to this space.



Figure 2.14: Central Saint Martins, College of Art and Design, School of Graphic and Industrial Design, University of Arts London, former London Institute, United Kingdom. Source: Luz, 2014: 160

The transitional space was characterised by the practice of walking; an in between space that accommodated for no pause or

lingering, leading to a dull and monotonous atmosphere (Luz, 2004: 160).

Simple installations were used to draw the user's attention to ordinary and unnoticed elements along the passageway in an attempt to evoke a liminal response to the lack of social areas within the space (Luz, 2004: 160).

However, after a month the temporary installations had to be dismantled and the space returned to its original state. It became once again a place characterised by neglected spatial practice as the users of that space had no desire take ownership over that space.

This is one of the main issues regarding liminal spaces. Temporal spaces, i.e. a passageway or street, is characterised by ephemeral qualities; therefore, people do not enact their rightful ownership over that place. It becomes an empty space, naked place of nomadism characterised by nothingness. Spaces of mobility are places of exchange, but if momentary pause is not accommodated for the true liminal experience of the threshold is not being maximised to its full potential.



Figure 2.15: Places of Pause Source: Luz, 2014: 161

2.2.6 Conclusion

It is clear that contemporary society has now focused its attention on ephemeral spaces of mobility instead of the isolated building, and that the successes of these spaces are directly dependent on the people moving through them. If the user, moving through space and time, is not recognized as the creative element, liminal experiences are diminished and detrimental to the construction of cultures.

2.3 PERCEPTIONS OF TRANSFORMATION

2.3.1 Introduction

The development of transient spaces is most affected during times of change. If transformation happens too rapidly, these spaces are not able to adapt in time to the detriment of cultural and social structures. If the perception of this change is lost, the conscientization of the transformation, enabling acceptance, will not take place.

2.3.2 Temporal Nature of Space

Places have become closer and information is instant as a result of technological innovations and advancement. 'All distances in time and space are shrinking. . . Man puts the longest distances behind him in the shortest time,' (Heidegger, 1971:163).

However, 'no abridging or abolishing of distances brings nearness,' (Heidegger, 1971: 175).

A universe characterised by near and a far distance is many textured, allowing for multiple perspectives and ideas regarding the temporality of space. This results in diverse societies and a multiplicity of cultures colouring space and time. When distances are abolished the universe becomes uniform and men are subordinated into society; their position depending on the category they are classed in, giving control to economic and functionalist ideals (Heidegger, 1971: 164).



Figure 2.16: Monotonous Architecture, 'merging everything into the distanceless,' (Heidegger, 1971: 164); a new suburb in Moscow. Source: Norberg- Schulz, 1980:187

Nearness is reclaimed when the essence of the space is understood. If man cannot experience space and time on his own terms, he will never be able to understand its true meaning; therefore, he will not understand his place in it. Space is not meant to be permanent, and human presence is defined by movement through space and the motions of time. If space was everlasting, it would lose the essence of time, and eventually become an irrelevant entity (Heidegger, 1971: 176).

2.3.3 The Development of Movement

As movement rapidly increased, so did the knowledge of the world, coinciding the theories regarding space on a global level. One of the main movements during this time was Functionalism, allied by the Russian Constructivism Movement. The main goal was to create flowing democratic space, by means of pure forms; if everything is the same then everything is equal.

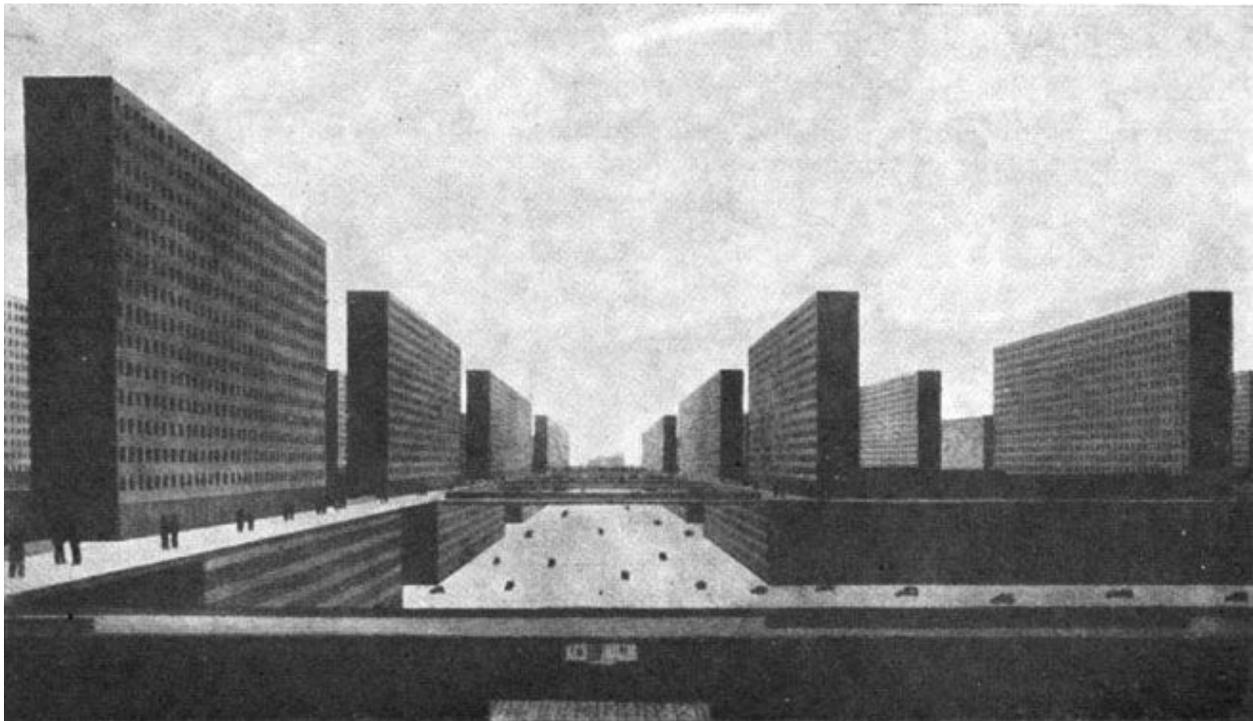


Figure 2.17: Ludwig Hilberseimer, The Ideal City. Roger Trancik (1986:21) defines it as 'a program based on ideals of pure forms and unbounded, democratic or flowing space,' and recognises its success because of fast and economical construction and its support of high rise technology. Source: <http://www.pinterest.com>

Functionalism's success is owed to the wars of the early 20th Century. There were little historical references as liminal experiences allowed for a 'clean slate' on which to begin development. During this time, people of the working class were struggling economically as the 'machine' taking over coincided with post war depression; however, the innovation and excitement regarding this change blinded society to the main cause of their struggles (Trancik, 1986: 21).

The terror aftermath of the wars, resulting in an aversion to public spaces (Norberg Schulz, 1980: 189), affected the architecture immensely. 'The terrifying is unsettling; it places everything outside its own nature,' (Heiddegger, 1971: 164). Attention was diverted towards individual buildings instead, pursuing social renewal through ideal abstraction, looking towards abstract forms instead of real life needs for inspiration for creating space. Vital aspects of everyday life and the habits of people were missed, causing socially unsustainable spaces (Norberg Schulz, :1980: 189).

Functionalism affected urban mobility through its main aspect, the grid, used to differentiate places and activities, compartmentalize functions to make sense of society's order and enforce control (Trancik, 1986).

The grid exists with no spatial containment, and space cannot exist without boundaries and limits (Luz, 2004). 'The difficulty in identifying the centre of a grid has promoted a notion of non- hierarchy and repetitive spatial structure,' (Trancik, 1986: 35).



Figure 2.18: Walter Gropius, The Bauhaus, Dessau, 1926. An example of a modern building existing in isolation, not relating to its context, living 'abstract life in a kind of mathematical- technological space which hardly distinguishes between up and down,' (Norberg-Schultz, 1980: 190). Source: <http://www.modernnow>



Figure 2.19: Herrington Kansas, 1887, American West Grid Source: Photo by John Reps in Trancik, 1986: 34

This structure of space coincided with the arrival of advanced transportation, unimaginably altering everyday life (Lemberg, 1977: 3).

As the distance between work and home increased there was an increased reliance on faster and more efficient transportation. This and the grid allowed for further expansion and resulted in urban sprawl. As peripheral suburban houses were developed, people relied on the motor vehicle and this form of mobility became a harsh necessity (Lemberg, 1977), with freedom of choice only being available to those who were able to own such a machine.

Modernism attempted to renew society by giving freedom to the urban dweller, concentrating human habitation and enabling free mobility through a natural environment between places; however, ideas were often unrealistic and the true essence was lost amongst continuous criticisms of post-modernist thinkers.

Modernist visions of industrial landscapes were painted with utopian ideals, often used to fragment spaces in order for the enforcement of state control (Scott, 2003);

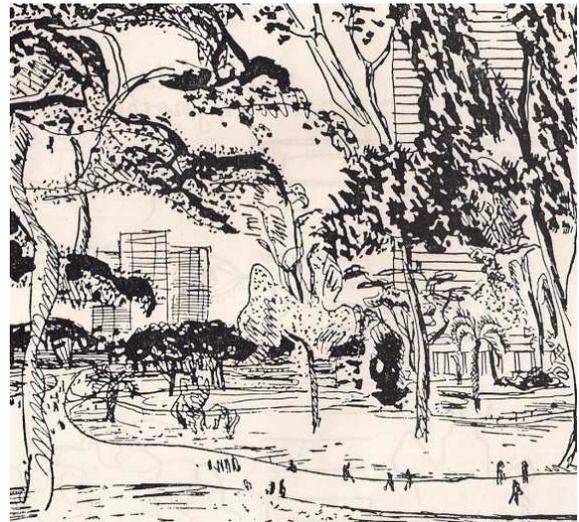


Figure 2.20: Le Corbusier, La Ville Radieuse, Perspective Sketch, 1930. Le Corbusier's idea of freedom to the urban dweller, which incorporated large parklike spaces within the city, led to an inhumanly scaled city and alienated societies (Trancik, 1986: 27). Source: <http://archdialog.com>



Figure 2.21: Le Corbusier, Plan Voisin, Paris, France, 1925. Source: <http://www.mediaarchitecture.at>

'the art of packaging,' (Leon Krier in Trancik, 1986: 36). However, modernist ideals cannot be criticized in isolation.

David Harvey (1992) deems it necessary to understand the movement of economics to understand history. 'It has become increasingly obvious that modern economies function to damage and destroy the ecological systems that support human and nonhuman communities.' (Daly, 1996; Korten, 1995; Starke, 2002 in Gruenewald, 2003: 632). This statement is romanticised and overlooks the main purpose of modernism. Post- modernism and Rationalism, although promoting concern for public open spaces over individual buildings, according to Harvey (1992), are bigger supporter of capitalist societies as it demands alterity and disregards the intentions of the modern movement (Harvey, 1992).

Not working off previous ideas to shape contemporary society results in the consequence of disrupted movement across time. Man does not exist long enough for his new ideas to make effective transformation, and unsustainable solutions come from a failure to carry thought across time.

2.3.4 Transforming Society

Liminality is a paradoxical concept as it is both social and personal (Thomassen, 2014: 4); even as it is about an individual passing through the in- between, it is also about how transitional spaces affect society at large. An 'exhaustive description of an area from one point of reference is, accordingly, impossible; its character changes with the point from which it is viewed,' (Giedion, 1941: 356).

This performance not only allows people to understand the spaces they are in, but enables solidarity (Thomassen, 2014). It is 'a realm of pure possibility whence novel configurations of ideas and relations may arise,' (Turner, 1967: 97 in La Shure, 2005: 2).

In a social sense, these spaces are void of any hierarchy, enabling radical possibilities as social order becomes irrelevant. Therefore, these are hybrid spaces, entertaining difference (Thomassen, 2014: 8) and essential for the construction of culture (Thomassen, Wydra, Horvath. 2013).

As a space of resistance against neo- liberalism, it becomes a place for discovering alternative modernity, however, liminality needs to be carefully problematized in the post- modern society of rapid change and the never- ending search for new possibilities

and innovation. A space of no boundaries only seeks to encourage this attitude, which in turn encourages capitalism (Harvey, 1992 in Roberts T and Hite A, 2000).

Victor Turner (1967) sees liminality as a space necessary for creating place of human creativity by shaking routines which can enable a 'balance of consciousness's (Thomassen, 2014: 11).

However, liminality is devoid of boundaries, and freedom without boundaries is not freedom at all, but emptiness. 'The boundary is that from which something begins its presencing,' (Heidegger in Trancick, 1986: 114), therefore, boundaries are necessary to enable existence in time and 'for the framing of human experience and for thought itself,' (Thomassen, 2014: 13). A space of infinite possibilities is a dangerous space as this space cannot quantify time.

Transient spaces connect larger networks together. Their importance, particularly for the poorer class and marginalized, is often undermined (Murrugarra, Larrison & Sasin, 2011). According to the theories of Durkheim (2002: 43), when these essential networks are disrupted, resulting in a failure to react to change, anxiety will be developed leading to a number of larger problems (Thomassen, 2014).

These spaces accommodate shifts in society's structures, therefore society itself is in a constant state of transformation and the perception of liminality evolves as one experiences life.

2.3.5 Perceptions of the Marginalized

Liminal individuals do not fall into the normal constructs of society, but have their own space of equal communal groups; 'they are betwixt and between the positions assigned and arrayed by law, custom, convention and ceremony,' (Turner, 1969: 95 in La Shure, 2005: 2).

Masterless men, vagrants, criminals, witches, gypsies, Jews, madmen etc. have been considered, throughout time, the representation and personification of the consequences of the industrial revolution, not the marginalized victims (Hetherington, 1997: 55).

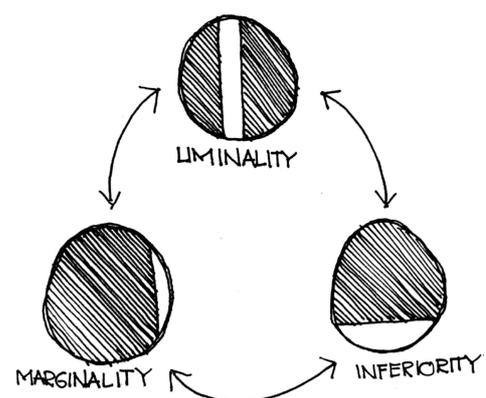


Figure 2.22: Three Manifestos: Liminality meaning between things, marginality on the edge of things and inferiority underneath society; not to be confused with one another as perceptions from these points are directly influenced by the spaces they are confined to (Lashure, 2005). Source: Sketch by Author

Whereas liminality defines a threshold space or a passage of transition, marginality describes a state of being which belongs simultaneously to two or more social/ cultural groups (Lashure, 2005).

It should not be considered as people who dwell outside of society, but as a group which perceives and is influenced by society from a point outside of society. This becomes a space in which radical structural change becomes possible and liminality- both the source and destruction of structure in society (La Shure, 2005: 3)- can be seen as a space in which structured and radical society meet; heterotopias 'of the unbounded and blurred spaces between rather than the easily identified space at the edge,' (Hetherington, 1997: 27).

The margin is not a place that someone is abolished to, but is a space occupied by choice as a standpoint or alternative perspective against what is observed as the norm. It offers alternative perspective from which new worlds can be visualised as it is devoid of dominant influences (Hooks, 1990: 149–150 in Gruenewald, 2003: 632).

'To be in the margin is to be part of the whole but outside the main body,' (Hooks, 1984: ix in Gruenewald, 2003: 631)

Using place as a construct for social analysis is a politicized approach to cultural geography and 'is centrally concerned with the neo- Marxist cultural critique and with global postmodern theory,' (Feld and Basso, 1996: 4 in Gruenewald, 2003: 631).

Marginality, a place of struggle and resistance, is a place inaccessible to political powers, and is identified as a site for re- visioning.



Figure 2.23: Dutch duo artists, Haas and Hahn changing the perceptions of the marginalised in Rio de Janero with paint. Source: <http://intelligenttravel.nationalgeographic>

2.3.6 Conclusion

Space should allow for alterity and individuality, however, rapid and unsustainable advancement has led to disrupted movement across space and time. Unsustainable movement through space has distorted human experience with surroundings; however, post-modern and capitalist society has opened up marginal spaces which enhance the liminal individuals' ability to enact necessary transformation. Understanding spaces and their transformations from multiple perspectives allows for change to be accepted and problematized. Denying this inevitable change leads to lost space within the urban fabric.

2.4 LOCATING LOST SPACE

2.4.1 Introduction

Refusing to let go of the past and move with the motions of time results in unshaped urban spaces as there is no commitment to the transformation. If people are not involved in the process of shaping their spaces they can no longer identify themselves' within that space. 'Space is the medium of urban experience,' (Trancik, 1986: 100). There is a responsibility for the shaping of space that is not recognized, resulting in hegemonic forms and abstract space. Rapid urbanisation and the inner city void has led to an increase of lost space within the urban fabric, however, modernist visionaries were able to predict this dilemma, and it is through their work that a reclamation of space can become possible.

2.4.2 The Experience of Transformation

Richard Sennett (1977) disregards the nostalgic man and instead of stepping back into tradition, moves forward with the continuously changing environment while changing perspectives on 'who' the public man should be. He contests the notion of the destruction of public due to cyber space by arguing for the 'resurgence' of public man in reconstructed forms of public. Just because something is not as it was does not mean to say that it is wrong.

Transient spaces, however, are adapting too fast and man is not able to evolve and emerge from the liminal state technology has confounded society in. They are not necessarily sustainable or facilitating true integration. There is a gap in their theoretical conception and how they are realistically implemented and influenced by technology (Luz, 2014).

Poor urban design is a result of indecisiveness; a neglect to let go of the past and commit to transforming society, leading to unshaped anti- space (Trancik, 1986). Change is not facilitated by the people who occupy the space, but through a top down approach which does not respond to community patterns and social relations; a result of zoning and urban renewal reasoning based on normative assumptions (Trancik, 1986).

Spaces, no longer accommodating physical and social diversity, are causing segregation. This is the reason for the success of functionalism as one of its main characteristics is 'starting from zero,' (Trancik, 1986). Existing systems are ignored and deemed irrelevant, resulting in a lack of social commitment and participation in the improvement of the environment. This task is then left to a minority who do not fully understand the systems moving through the space which they are changing, leaving no room for spontaneous transformation.

Spontaneous transformation will always be radical as it alters the routines and motions of the everyday life (Goonewardena, Kipfer, Milgrom, Schmid, 2008: 199). These transformations are the ones that take place when society is at a tipping point of imbalance and it is obvious that the one side of the scale is going to fall into darkness if a change is not initiated.

Lefebvre (1976) theorises about the gaps and imbalances between levels in society, and how the mediation and interaction between these levels can result in the dominations and incorporation of one level into another, depending on the time and place of the encounter.



Figure 2.24: Lefebvre's rhythmanalysis in Interbellum Berlin , representing everyday life as the production of capitalism (Goonewardena, Kipfer, Milgrom, Schmid, 2008: 199) Source: <http://citybreaths.com>

2.4.3 The Shaping of Spaces

Systems are becoming increasingly complex as time moves on. Technology is advancing rapidly, globalisation is spiralling out of control and capitalist influences are controlling societies and lifestyles.

The shaping of space is a political process and is both the source and product of social transformations (Greunewald, 2003). People need to be involved in place- making to rid the political ideologies that have shaped space throughout history (Lefebvre, 1976: 31 in Greunewald, 2003: 628).



Figure 2.25: Formalist Architecture. International Port Terminal, Yokohama, 1996- 2002, Source: <http://www.archdaily.com>

‘If human beings are responsible for place making, then we must become conscious of ourselves as place makers and participants in the socio-political process of place making,’ (Gruenewald, 2003: 627). This responds to the notion of good citizenship which is required for a democracy to be successful. Seeing space as an inevitable product of culture and social relations destroys the ideals of citizenship and democratic society.

It is the processes of formation that enables experience and identification between man and space. True formalists do not only see the shell of the form, but are able to understand the processes and systems that resulted in the form itself, ‘the space where indeterminacy or historical becoming unfolds,’ (Kwinter, 1994 in FOA, 2003: 98).

Spaces, however, can also be shaped to maintain domination over subaltern groups; enabling order and control. By strategically shaping spaces to control society there is

little need for order to be enforced through man power. 'Domination is maintained not through material force but through material forms,' (Gruenewald, 2013: 628).

Critical social analysis identifies the geographical relationship between people, places and hegemonic forces. The power of political and social institutions is legitimised through the control over space (Gruenewald, 2003:629) and this is enforced through panopticonism:

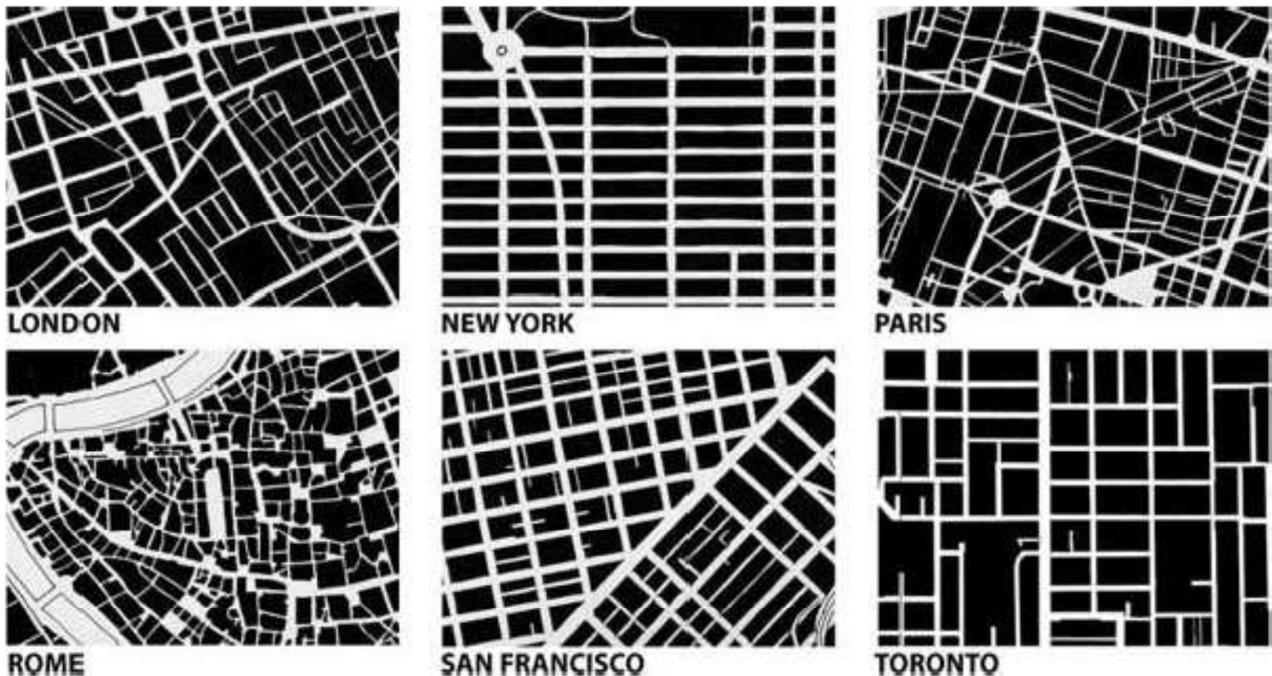


Figure 2.26: Precedent illustrating accessibility and permeability of World Cities as 'it is the articulation and differentiation of solids and voids that make up the fabric of the city and establish the physical sequences of visual orientation between places,' (Trancik, 1986: 100). Source: <http://www.pinterest.com>

One of the methods used is the privatization and gentrification of spaces. This removes physical spaces from the public realm through which political power is developed. Power depends on, is facilitated by, and is reflected in the development and control of geographical space. Inquiry into this can begin with an analysis of the relationship between public and private space and the interrelated consequences of the local and global effects of capitalism (Trancik, 1986: 100).

Analyses on hegemonic space in relation to the 'everyday' were reformulated by Lefebvre, specifically relating the actions of the bourgeoisie to the production of space and its hegemonic qualities (Goonewardena, Kipfer, Milgrom, Schmid, 2008: 198- 200).

'The dominant form of produced space under capitalism is abstract,' (Goonewardena, Kipfer, Milgrom, Schmid, 2008: 200). Abstract space is a visual representation of the dreams and aspirations of subaltern classes, capturing them within a void of enforced ideologies in which no state of solidarity can be achieved.



Figure 2.27: Lefebvre's abstract space is hegemonic precisely because it 'incorporates difference in all its dimensions,' (Goonewardena, Kipfer, Milgrom, Schmid, 2008: 203). Source: <http://anarchistwithoutcontent.wordpress.com>

2.4.4 Understanding Anti- Space

Contemporary society is experiencing a time- space compression because of rapid transformations, removing spatial barriers and providing shorter time horizons. This has resulted in a crises identity as the sense of location in space and time is lost (Harvey, 1992: 295).

Movement over time results in unused land and infrastructure (Trancik, 1986), disrupting the continuity of the urban fabric and rendering urban mobility 'a disjointed, disorientating experience,' (Trancik, 1986: 2) 'Never before in the history of the world have non- places occupied so much space,' (Benko & Strohmayer, 1997: 26; Auge, 1995 in Thomassen, 2014: 12).

The first step to understanding these gaps is identifying the causes for anti-space.

Roger Trancik (1986) highlights five main causes: the automobile, modern movement in design, zoning and urban renewal, privatisation of public space and changing land use. But the biggest issue is that 'the spaces between buildings are rarely designed,' (Trancik, 1986: 8).

Development disregards emotional connection with space, 'and no level of development can be maintained if it remains detached from our emotional life. The whole machinery runs down,' (Giedion, 1943: 351).

'Lost is the settlement as a place in nature, lost are the urban foci as places of common living, lost is the building as a meaningful sub- place where man may simultaneously experience individuality and belonging. Lost is also the relationship to earth and sky,' (Norberg- Schultz, 1980:190).

Lost space cannot be blamed on functionalist ideology alone; ideals of social hygiene and concepts regarding the 'garden city', 'new town' and 'suburbia' caused an abandonment of the inner city, resulting in urban life moving through 'dead' spaces (Trancik, 1986: 39).

2.4.5 Reclaiming Space

Understanding non- place as a spatial typology is essential to recovering lost space, (Trancik, 1986). Identifying these gaps is not enough to resolve this issue. The history and opportunities of the space need to be recognized and filled with flexible and enabling frameworks.



Figure 2.28: Syracuse, New York, Lost Space at the Edge of the Freeway, 1983, Source: Carol A. Brower in Trancik, 1986: 5



Figure 2.29: Houston, Texas, Aerial Photograph, 1985, An example of the 19th century phenomenon of rapid urbanisation (Giedion, 1943: 467). Source: Harper Leiper Studio in Trancik, 1986: 9

To reclaim lost space ‘there must be a willingness to reconsider the object and evaluate the ground rather than worship the figure,’ (Trancik, 1986: 106).

Robert Venturi (1966) identified lost space as a positive paradigm to enable solidarity, as it lay outside the boundaries and influences of modernism. He recognised that the open space left over from the Modern Movement had indeed become lost space and set to reclaim this space through inclusive design. He was set apart from other urbanists as he saw ‘lost space in commercial strips and suburbs as inevitable,’ (Trancik, 1986: 37).

Peter Cooke- one of the founding members of Archigram- presented an ingenious idea which would enable the reclamation of lost spaces. The ‘Plug- In City’ was ‘a concept for a city of continual change in which enormous technical frames served as an infrastructure that hosted interchangeable cells of habitable space,’ (Webb, 2005: 37). It suggests a hypothetical fantasy in which the thing constructed is not a city ‘but a constantly evolving megastructure that incorporates residences, transportation and other essential services- all movable by giant cranes,’ (Merin, 2013:1). It was designed to not only facilitate, but inspire change (Matilda, 2002: 142).

This project reflected the concerns for modernism and ‘suggested a nomadic way of life and, more importantly, liberation from the modernist answer of suburbia,’ (Merin, 2013: 2).

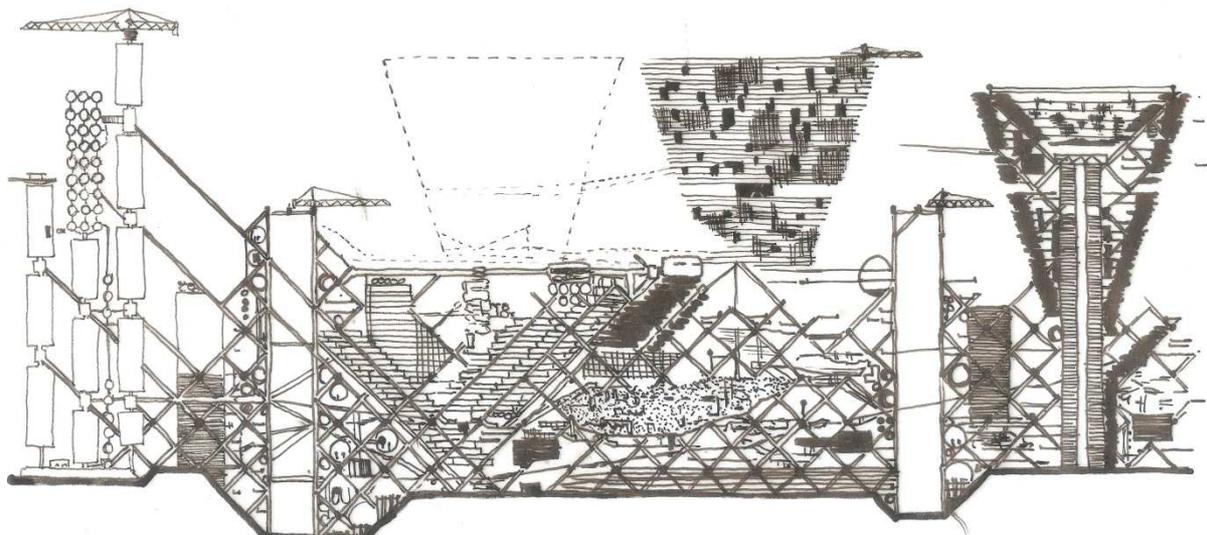


Figure 2.30: Peter Cooke, Plug in City, Source: Sketch by Author

The designers of this group identified the values in modernist thinking and were able to translate them into their ideas and drawings, further emphasising where modernism went wrong (Merin, 2013: 3).

However, Archigrams drawings were made by hand in abstract contexts (Webb, 2005: 37), distorting the design when it was translated into reality, as seen in Alan Buxley's translation of the 'Plug- In City' in Houston.

However, these ideas, too radical for their time, have been carried across history and are responsible for influencing many of the successful architects and urban thinkers today such as Richard Rogers and Renzo Piano (Merlin, 2013: 142).



Figure 2.31: Renzo Piano and Richard Rogers, Pompidou Centre, Beaubourg Source: <http://alainekanninterview.com>

2.4.6 Conclusion

The multitude of lost space in the urban environment is not a result of technology or industry, but through a neo-liberal society not taking responsibility for the public spaces they occupy. The location of lost spaces, in-between different classes of society, lacks the integration of social structures because of economic differentiation. However, enabling and adaptable frameworks can allow for lost space to be reclaimed by the user, renewing modernist ideals.

2.5 CONCLUSION

Movement through space and time has profound effects on cultural and social constructs, and how this movement shapes the urban environment directly affects man's perception of his surroundings.

Movement is a continuous, eternal process, which shapes spaces, thought and consciousness across time. Liminal experiences of transformation have been

metaphysically analysed in order to determine how these have impacted the processes of movement and perception from various points in space.

Modernist visionaries were able to identify this aspect of time and predict the rapid movements of the globalising world. However, their ideas brought into reality often resulted in the unsustainable transformation of space leading to unshaped urban spaces forming rifts in society and the urban fabric.

One can conclude that there is a direct link between movement and space, furthermore, social constructs. It is these social constructs that give space its cultural meaning through the process of place- making; a process in which architecture is the key element.

CHAPTER 3

EXPERIENCE AND SHAPING OF SPACE

“Once one begins to appreciate the pedagogical power of places, it is difficult to accept institutional discourses, structures, pedagogies, and curriculums that neglect them.”

(Gruenewald, 2003: 641)

3.1 INTRODUCTION

When space is confined to a point in time, it forms a relationship with man as it is induced with cultural meaning. This is known as place. 'Whatever space and time mean, place and occasion mean more. For space in the image of man is place; articulate and in between,' (Aldo Van Eyck in Trancik, 1986: 114). Space is becoming a central issue for social theorists (Hetherington, 1997: 20) as experience with place and the 'irreducible plurality of social relations' (Hernandez, 2002: 106) evidently defines society.

However, experiences with place is transforming at such a speed due to globalising forces, that this imperative relationship is being disrupted, along with its pedagogical qualities. Edward Soja (2000) highlights how ideals of democracy are being undermined through the privatisation of public space, coinciding with David Harvey's (1992) perceptions of history from an economical point, providing an alternative view on post- modernism.

The street space is the main focus, as it is a space of movement that has changed from a place of mixed use qualities to one characterised by speed; an issue recognised before its time by modernist visionaries. Through the works of Pedro Gadanho (2007), the street is perceived not only as a transient space, but as a place of performance.

3.2 PEDAGOGICAL PLACE

3.2.1 Introduction

Perception of spaces is directly related to how man perceives his peers and understands his place in nature. 'Places are the ground of direct human experience,' (Gruenewald, 2003: 623). By ignoring this pedagogical connection with place, he is refusing responsibility for his place on earth, relinquishing participation in its creation.

3.2.2 The Human Experience of Place

Man is developing differently to his ancestors because his experience with place has been disrupted. Current lifestyles are preventing development during critical stages of cognition. This disruption destroys carnal empathy, resulting in a lack of emotion and understanding for the places moved through and lived in (Gruenewald, 2003).

Places operate pedagogically on a level below the consciousness (Gruenewald, 2003: 627); therefore the relationship and emotional connection with place is often not recognized, leading to a lack of participation.

Participation is essential for perceiving and experiencing place (Abram, 1996: 69 in Gruenewald, 2003: 624). Lack of participation leads to a disconnection between man and place and misunderstood relationships within society (Gruenewald, 2003: 622).

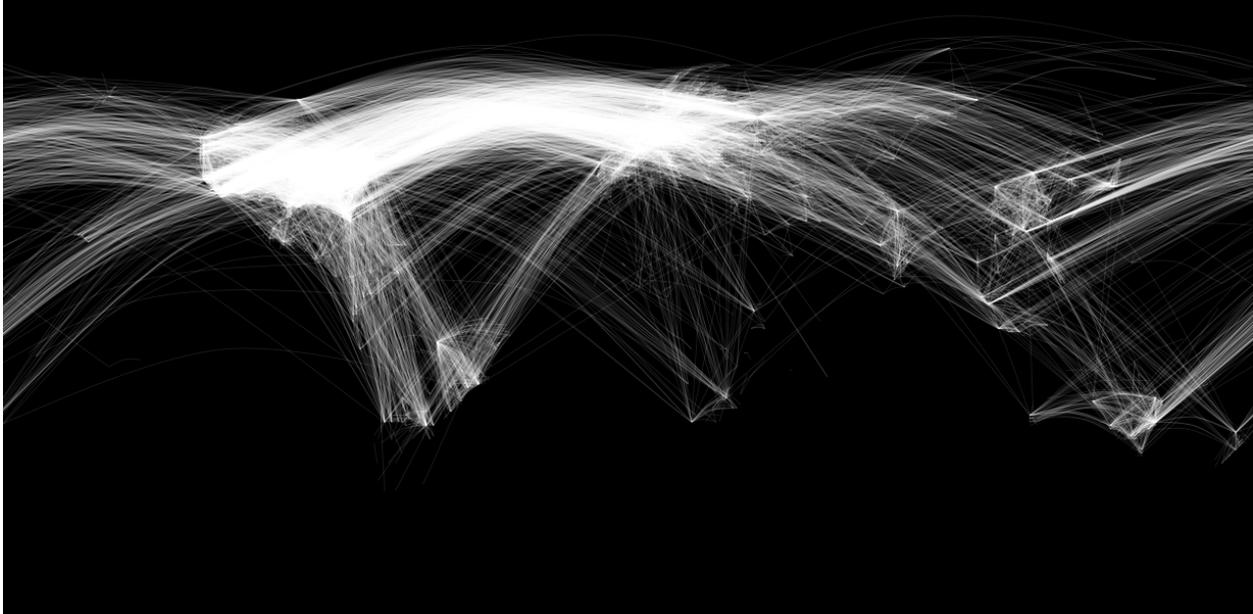


Figure 3.1: Global Connectivity Due to Technological Advancement, ‘look how one press of her foot sets a thousand threads in motion- how the shuttles dart to and fro, the flowing strands intertwine and a thousand interconnexions are made at one stroke!’ (Knapp, 2003 in FOA, 2003: 640). Source: <http://geographicaladvantage.aag.org>

Abram (1996) attends to ‘a phenomenology of perception as a necessary step toward caring for the cultural and ecological lives of places and understanding how one place is connected to another,’ (Gruenewald, 2003: 624). These connections in place and nature are complex and interrelated (Knapp, 2003 in FOA, 2003: 640), therefore only by moving through space is an empathetic understanding of place gained.

3.2.3 People- Place Relationship

People and cultures are what give places their meaning. People often take social spaces for granted and do not see it as cultural products, but instead as inevitable outcomes and not problematic products of human decisions (Gruenewald, 2003).

Relationship between man and his surroundings are the focus of modern science, a paradigm known as phylogeny, ‘the genesis of diversity,’ (Knapp, 2003 in FOA, 2003: 638).

‘Space is a bounded or purposeful void with the potential of physically linking things, it only becomes *place* when it is given a contextual meaning derived from cultural or regional content,’ (Trancik, 1986: 112). Presumed meanings of place thwart perceptions and annihilate the essence of objects moving through space and time, as

Institutional structures only stand to develop consciousness between people and the places they manipulate, not the land in its natural state, rendering man autistic as he has no longer participates in place-making (Thomas Berry, 1988 in Gruenewald, 2003: 624), instead accepting 'existence as noncontroversial or inevitable,' (Gruenewald, 2003: 627).

Pseudo-analytic thinking blinds man by "facts" resulting in meaningless places as he is not able to "dwell poetically". In order for identity to be re-established, an "education through art" is necessary for man to contribute to history through creative participation (Norberg-Schulz, 1980: 201-202).

3.2.4 Imposition of Place on Society

Sustainable communities are directly dependent on the ability of that community to change and adapt over time without compromising another in the process. A common thread in mitigating global crisis is the lack of attention paid to communities and social constructs (Aliyu; Ebohon; Gyoh, 2014). The 1960's brought about an idea of creating new communities "from scratch", but utopian vision brought to reality through technological innovation, resulted in suburbia sprawl, unsustainable communities and economic disaster. (Trancik, 1986).

E. Charlesworth and R. Adams (2011) highlight the gap of empirical research regarding global warming and realizable design visions to solve the current unsustainable cities, resulting in uncertain futures. The extensive use of technology in cities create a very noisy environment, which is related to developmental outcomes- academic achievement, cognitive, social and emotional development in children and adults and physical effects of high blood pressure and an influx of stress hormones (Sylva, 1994).

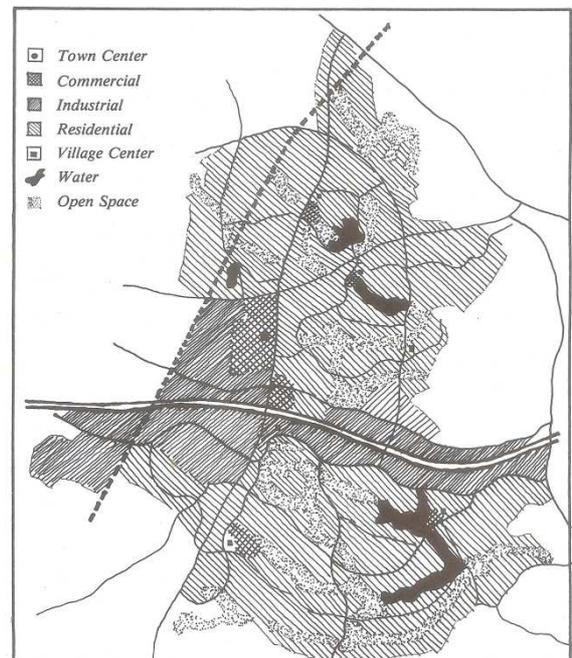


Figure 3.3: Robert E. Simon's development for Reston, Virginia. A failure of the New Communities Program initiated by President Lyndon Johnson because of lack of attention paid to the economic circumstances of communities rendering self-sustaining, mixed income community's impossible. Source: Trancik, 1986: 55

Contemporary spaces, directly impacted by globalisation, are designed for security through the formation of harsh barriers between public and private realms.

An influx of foreign cultures into the cities implemented an element of fear within society resulting from a lack of understanding between people's differences. This also results in a sense of fear for safety, specifically surrounding children, regarding traffic and lack of supervision in the community (Kopko, 2013).

The security value in higher visibility and social value in public and private thresholds is not recognised (Van Gruenen, 2014).

Uneven development and a decline in the local economy, a local economy which can be used by the people to free themselves from oppressive systems and lift them out of poverty, is consequence of these unrecognised spaces.

The mall is an excellent representation of a place characterised by globalisation. Trade is no longer defined by social connections as automation and major corporations have deemed this unnecessary. A mall lacks cultural meaning as there is a lack of engagement within the space. Man is defined by his economic status as we walks through a mall, not by the place itself, highlighting Heidegger's (1971) theory of 'nearness' and how the time- space compression has abolished this notion.

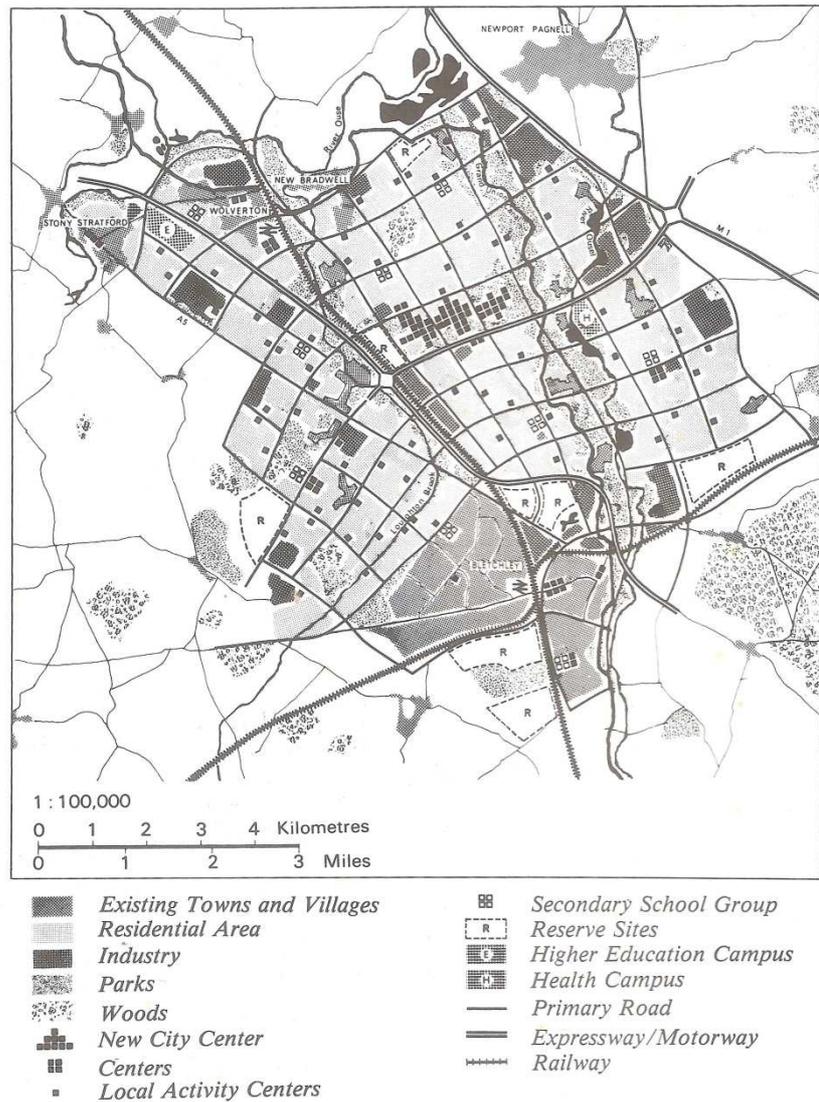


Figure 3.4: Milton Keynes New Town in England, 1970. Uniform grid of roadways intended to give maximum flexibility, but instead resulted in a lack of hierarchy and low density housing resembling an American Suburb. Source: Trancik, 1986: 32

Another consequence of technology, with specific regard to the automobile, is that the need to walk becomes unnecessary, resulting in a decrease of physical activities. The spaces in which people move through are not conducive to this form of mobility. This leads to larger distances between amenities, no local supervision, reliability on technology to move through space and obesity and vitamin D deficiencies in urban dwellers (ICU, 2011).

There is a serious lack of engagement between the individual and their natural surroundings by not walking. Kopko (2013) highlighted that there was a strong contrast between the previous generation's engagement with the natural environment and today's generation.

Mobility designed for efficiency and not equality, has greatly affected the way people live and arrange their lives, as well as contributing to further segregation in a globalizing world.

3.2.5 The Transition of Public Place

Democratic spaces are responsive, public places that have legibility, permeability, variety, robustness, visual appropriateness, richness and personalisation (Van Gruenen, 2014). They are spaces that maximise the degree of choice to allow for individuality and differences to emerge. If a public space is privatised it is no longer part of democratic society and therefore cannot function as a public place (Goonewardena, Kipfer, Milgrom, Schmid, 2008: 158). 'The city has



Figure 3.5: Berea Road lacking proficient amenities and services for pedestrian activity Source: Photo by Author, 2015



Figure 3.6: Constrictions placed in the open public space outside St Peres in Rome Source: Photo by Author, 2013

become a showplace for the private ego at the expense of the public realm,' (Trancik, 1986: 17). Public urban spaces are no longer cultural hubs, but perform a utilitarian function. It is a place dominated by monuments praising political powers (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 158). This brought about a need to use connective spaces instead (i.e the streets) as dynamic spaces are more difficult to control.

Throughout these shifting dynamics in democracy, the essence of what a democratic space is has been lost. In order to regain this consciousness, perceptions needs to change in order to challenge socio- economic panic with technological progress (Goonewarden, Kipfer, Milgrom, Schmid, 2008: 153). This progress is inevitable and irreversible (Deleuze and Guattari in FOA, 2003: 523).

'Mies set his architecture against the perpetuation of old habits and in the service of emergent and experimental ways of doing things,' (Mertins, 2003 in FOA, 2003: 272). His idea of universal space was not some narrow- minded ideal of function, but generating open- ended, inclusive space which could accommodate a range of functions over time. 'The purposed for which a building is used are constantly changing . . . and we cannot afford to tear down the building each time,' (Meis in Mertins, 2003 in FOA, 2003: 271).

The idea was to discover a universal principle which would reintegrate society with nature across the globe by allowing for space to be adapted, transformed and governed by creation (Mertins, 2003 in FOA, 2003: 274).

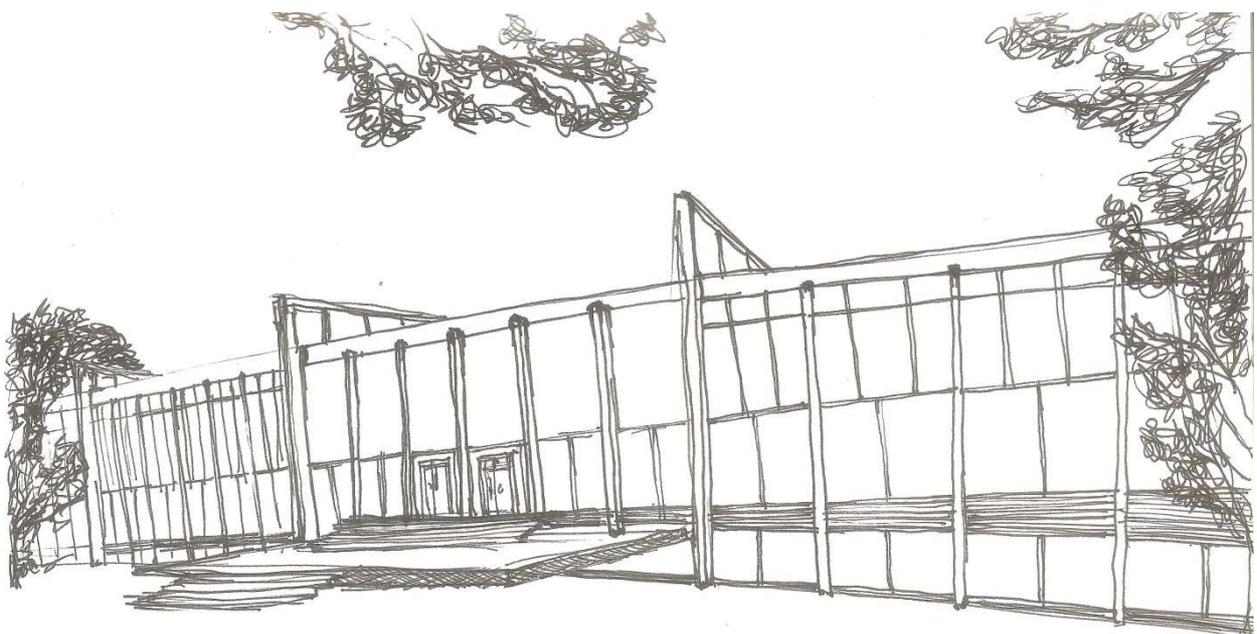


Figure 3.7: Mies' Infrastructure of Difference, Crown Hall. Source: Mertins, 2003

3.2.6 Conclusion

The pedagogical qualities of place are what define contextual and cultural identities within society. Globalisation, segregation and privatisation has transformed these identities, therefore, the places in which man moves through and dwells in. Global Society is constantly searching for new technologies and updated practices to solve world crises (Van Greunen, 2014), however, moving too quickly can be detrimental to the already unsustainable situations. A system which has the ability to balance ecosystems and adapt to inevitable change is essential.

3.3 EFFECTS OF CONTEMPORAY SOCIETY ON PLACE

3.3.1 Introduction

Neoliberal society and the privatisation of public places are forming large gaps between classes, resulting in static urban areas, segregation and inequality. This forms the paradox of globalisation. As globalisation enhances mobility and opportunities, it also forms peripheral places of oppression in which dystopian societies are formed through the irreversible process of urbanisation (Aliyu; Ebohon; Gyoh, 2014). However, contemporary society is characterised by continued mobility and the performative character of man still exists and is evident in transient spaces.

3.3.2 Privatisation of Public Place

Fragmentation and ephemerality open up spaces and opportunities for development of new fields and forms of profit making. This manipulation 'is based on crude social theories and sought to engineer society through technical manipulations of the physical environment,' (Scott, 2003).

Supposed public spaces are designed for a general public interest and rezoned to fulfil the function of an efficient economic system according to private evaluation of future profits (Lemberg, 1997). The architecture is obsessed with technology and freestanding buildings, ignoring the public and interactive spaces.

Spaces should be planned 'for citizens in conflict, having different interests and different values,' (Lemberg, 1997: 15). Systems are too often designed for the most efficient effect at the present time; analysed as fixed systems with no attention given to the transitional dynamic problems and the system's change over time.

Transient spaces are most affected. Mobility and communication became increasingly dominant in contemporary society and the facilitation became prioritised. This made thoroughfares, highways etc. the predominant open space which lacked cultural meaning and human purpose (Trancik, 1986). 'Urban life seems to have become centred on the ability to own a car and the ingenuity to find a place to put it,' (Wilfred Owen in Lemberg, 1997: 11).

Streets have transformed due to privatisation and no longer fulfil their function to the public (Lemberg, 1997: 6). The urban landscape has been unimaginably altered through the arrival of the privatized car and its transport infrastructure, 'dictating the design and patterns of the social environment,' (Lemberg, 1977: 5). What used to be transient spaces of public activity, accessible to all, has now become high speed, polluted areas which people shy away from, or risk their lives attempting to cross.

3.3.3 The Movement of Globalisation

Globalisation is an 'act of geographical violence through which every space in the world is explored, chartered and finally brought under control,' (Soja in Gruenewald, 2013: 629).



Figure 3.8: Parking Lot at Fiar Lingotto, Turin, Italy, Source: <http://www.interculturalurbanism.com>



Figure 3.9: Hitchhikers on the N3, Durban. Source: Photo by Author, 2015

Globalisation is characterised by simplification and oppression and global thinking is only possible on a macro scale, undermining local traditions and routines (Gruenewald, 2013:19–20). The success of the global economy is largely dependent on uneven development, control and domination (Gruenewald, 2003).

Domination, enforced through geographic and economic measures (Hernandez, 2002: 128), is only successful when following the spatialized economic equation: *'The production of wealth depends on extracting surplus value (in terms of labour and resources) from one geographical region to benefit people in another,'* (Burbules & Torres, 2000; Esteva & Prakash, 1998; Korten, 1995; Said, 1994; Soja, 1989; Spring, 1998 in Gruenewald, 2003: 629).

'Composite cities' (EURAU, 2014) are becoming increasingly complex through rapid changes which are continuously redefining urban experience. Cities can either become enriched and exciting place to live in with influences from many different elements integrated into a heterogeneous whole, or a place of segregation where a fear of unknown elements causes social disintegration. There are also concerns of the city becoming one homogenous culture.



Figure 3.10: Rio-de-Janeiro.2013; Example of the spatialized economic equation. Source: Pedro Gadanho, <http://moma.org>

Technological advancement brought about the arrival of the privatised car and advanced transport infrastructure; 'mobility, motions and the automobile became tools for isolation,' (Trancik, 1986: 6).

Roadways are spaces that have been engineered and not designed. As a result of people's relationship with space and the political process which shapes spaces we move through, transportation infrastructure can then be used strategically by dominant forces to maintain control and order through segregation. Spatial segregation is a result of an auto- mobile dependent society and it is the main cause of suburban sprawl (Van Greunen, 2014).

Globalisation free of dominant forces, however, opens up numerous opportunities for communication between multiple cultures, allowing for a multitude of perspectives to be shared enabling deeper understanding and conscientization of place. This can lead to numerous opportunities; however, conflict may also arise as the individual's identity is threatened. Without intercultural communication, differences are not understood.

Globalisation is a good contributor towards these communications, however, 'hardly any consideration is given to the social and political circumstances in which that communication occurs,' (Ikas and Wagner, 2009: 1 in Shange, 2013: 34).

3.3.4 Static Urban Places

In a globalising world it is cities that become catalysts for economic growth and development; however, this exerts pressure on the environment beyond the city boundaries.

Rural immigrants are forced to move as a result of the economically driven spatial segregation (Van Gruenen, 2014), and increasing population in cities. This develops into peripheral informal settlements with shacks filling in the leftover spaces. Fragmented and unsustainable communities form from occupants lacking a sense of a place and an emotional connection with their surroundings (Aliyu; Ebohon; Gyoh, 2014). They are in a permanent state of liminality.

There are certain ideologies in the African cultures that urbanization is a 'defilement of pure African identity' (Pieterse, 2010: 13) and a symbol of political elites enforcing their power and dominance over the poor. The effects of globalization are currently enhancing the social division, economic marginalization, and scepticism over the state in rural communities. The communities that are affected the worst are informal peripheral settlements (Pieterse, 2010: 18).

Informal settlements are well understood by the actors involved (Myers, 2011). Everything that exists serves a very specific purpose and everything functions efficiently because of the lack of rules and regulations.



Figure 3.11: Sketch showing the character of an informal shack land in Cato Manor, formed as a collective action as a result of fleeing township violence and its extreme densities or seeking economic opportunities near the city (Odendaal, 2003). Source: Sketch by Author, 2015

These settlements become places of refuge against the difficult times of change, with discontentedness and resistance increasing as a result of a lack of identity and belonging in the African city (Simone, 2004).

Poverty needs to be analysed as a social phenomenon in order for social capital, the biggest asset in poor communities (Pieterse, 2010) to be taken seriously by the state. Disrupting these invisible connections can be detrimental to the livelihoods and practices of the inhabitants and result in high levels of contestation, ‘criminalizing their survival mechanisms’ (Pieterse, 2010: 18).

Organizations, disrupting these delicate systems, through insensitive and unfair handling (Murray, 2008), perceive informal settlements as dystopian communities because of their lack of understanding of why they function the way they do.

Instead of directly dealing with the issues at hand, the informal settlements are wished away and relocations become a common practice. This not only prevents communities from investing in any sort of improvement because of the constant threat of evictions, but it also creates high levels of internal competition when it comes to housing delivery (Simone, 2004).

Simply enforcing utopian ideals is not going to miraculously result in a sustainable and ordered community. These settlements don’t want to be relocated or disrupted and attempts to enforce urbanization could result in high levels of conflict and violence.

Performance retains a cultural dimension as place produces a commentary role regarding the ongoing transformations of culture and society.

Streets and public spaces have started becoming the place of cultural expression and voice of the people, using artwork to scrutinize the spaces political dimension (Gandeho, 2011: 3).



Figure 3.14: Shen Wei Dance Arts Public Performance in Times Square Source: <http://nyclovesnyc.blogspot.com>



Figure 3.15: Protests in Public Spaces, 'People of Europe Rise Up!' was a huge banner held outside the acropolis purposefully to gain international attention. This influenced street protests in North Africa, Athens, Madrid, Brussels and London. Dutch intelligentsia occupied museum courtyard in a claim against culture budget cuts and 300000 people gathered in Lisbon streets, which resulted in the government resigning two weeks later. This movement of performativity is also evident in Banksy broadcasting subversive irony across cinemas, BIG embracing parkour to publicize one of his buildings (Gadenho, 2011). Source: <http://www.trekearth.com>

'Everywhere on sight books on graffiti, intervention art, skateboarding and urban hacking had crept over the main displays, leaving little space for other artistic expressions,' (Gadanhó, 2011: 2). It is reflective on a generation believing in the transient nature of space and attempting to form an emotional connection through creative expression (Gandeho, 2011: 3). The spaces in between have started

2015: 4). Infrastructure should be observed as a form of capital, one that interacts with all other kinds of capital whether it is economic, political, natural, human or social.

It is put in place to enable access to basic, daily needs. However, 'infrastructure can also have direct negative impacts on populations, serving as a material channel for structural violence, war, and environmental catastrophes,' (Rogers and O'Neill, 2012 in Howe, 2015: 4). It is not strictly utilitarian, but serves to embody larger structures of power and direction, especially when the control of its design and distribution is in the hands of a few dominant parties.

The paradox of infrastructure is that even as it generates opportunities and possibilities, it also degenerates and can have negative effects on marginalized communities. It is too often implemented and designed, by people who don't have any need for it, in order for the enforcement of domination and control to become unnecessary. The designs of these spaces don't respond to the basic needs of the people (Howe, 2015: 9-10).

The uneven provision and maintenance of infrastructure will result in segregation within our cities and splintered urbanism (Howe, 2015).



Figure 3.20: Pedestrian Bridge extending across the N3, Durban, to DUT Steve Biko Campus known as the 'suicide bridge' because of the risk taken when crossing it. Source: Photo by Author, 2015

During moments of breakdown, the meaning of infrastructure becomes visible to everyone, representing the social conditions and demonstrating 'historical and cultural attentions in a particular moment,' (Howe, 2015: 6). These moments of ruin should be viewed as constitutive, visualizing infrastructure as a reproductive system enabling society's wellbeing. It is 'not only a transitional state, but a condition in its own right, a space between the past and the future,' (Gupta, 2013 in Howe, 2015: 7).

Infrastructure is needed to bridge timelines, therefore it needs to encompass the ability to adapt to evolving systems. ‘The inability of an infrastructure to “grow”—or to change and adapt to new environments—is one reason infrastructures meet their end or fall into disuse (Edwards et al. 2009). This is a result of the inability of man to manage temporality.

People move through space in an unregulated and informal manner. Therefore the infrastructure needs to respond directly to this. One cannot predict how movement will change over time. Infrastructure needs to be characterised by improvisation and anticipation in order to enable an uncertain future.

3.4.4 The Transgression of People

The migration of people has a huge impact on the effects of poverty.

Increased mobility and freedom of movement give marginalized populations the ability to lift themselves out of poverty and strive for an improved lifestyle. This is a result of people following the shifting dynamics of the economy. ‘Migration is not an alternative to economic development, but rather is economic development itself,’ (Murrugarra; Larrison; Sasin, 2011: 3).

When this movement is prohibited because of barriers such as distance, time, monetary expense, passports or sexism, people become trapped in their place of origin and this can lead to a loss of impetus for self-improvement, a despair for their home and also holds huge economic and social implications (Murrugarra, Larrison & Sasin, 2011).



Figure 3.21: City in Ruins. A representation of the failure of the homogenized housing projects of the 50s, 60s and 70s designed to allocate migrants coming from the countryside to the big cities (Hernandez, 2002: 126). Source: Photo by Aubrey P. Graham in Murray, 2008: 172

Evidence points to transmigration resulting in a reduction of poverty as well as becoming a coping mechanism for shock which is often caused by sudden and unexplained transitions in lifestyles. Most of the infrastructure put in place to accommodate this movement has been unsuccessful and people have had to adapt illegally and unconventionally to spaces (Hernandez, 2002: 126). They do not take into account the differences of the people moving through these spaces.

The social constructs within these spaces are dynamic as immigrants are in a permanent state of liminality. If people's movements are restricted then they cannot pull themselves through liminal experiences. These restrictions are imposed regularly as transport is designed for economic purposes and not for people.

'It was industrial capitalism, with its creation of an urban proletariat- most immigrating from rural areas- of factories and of large scale transport tracks and terminals that made transport an important urban element,- at first, however, for goods transport,' (Lemberg,1997: 3).

However, the spaces left behind become problematic as these places do not get developed, resulting in rapid deterioration as the community disintegrates.

3.4.5 Visionary Transformations

Spatial designs are successful when they are not retroactive, but anticipate arising problems and solve those using innovative techniques (Giedion, 1943: 499). 'We can't solve problems by using the same kind of thinking we used when we created them,' (Albert Einstein cited in Adams, 2011: 31). Designs must cease to be manipulated impositions on places, but change and adapt as the city moves over time, considering 'how new and old buildings and spaces fit together into the established urban context,' (Trancik, 1986: 116).

The greatest visionary who had a large impact on one of the most important cities throughout time was Georges- Eugene Haussmann. In the Paris of Napoleon III, 'one element dominates all others: the street, the "cannon- shot boulevard," seemingly without an end,' (Giedion, 1943: 465).

The primary design principle for the streets was to utilise them for defence strategies during the 1852 French Revolution by accommodating marching troops and ameliorating infected alleyways (Giedion, 1943: 471). The most important principle, however, was the facilitation of circulation from the railway stations to the centres of commerce and pleasure.

One of the few critiques is that the scale of his work was designed for enormous masses and not at a human scale; streets lacked 'organic identity,' (Giedion, 1943: 498).

In the modern era, there were numerous architects who were able to understand the purpose of architecture and place.

'The work of Louis Kahn appeared as something of a revelation at a moment of crisis when many architects were losing their self- confidence and faith in architecture,' (Norberg- Schultz, 1980: 197). He understood architecture in terms of place.

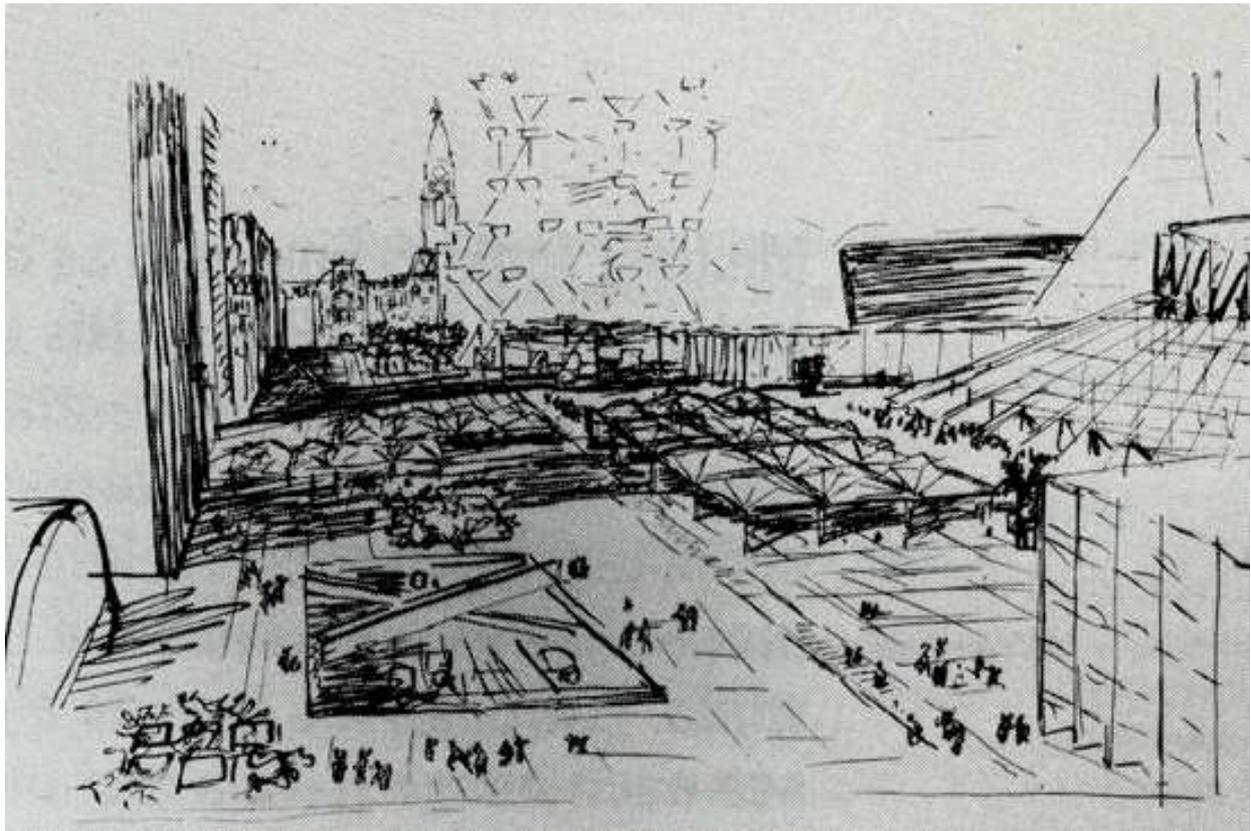


Figure 3.24: Louis Kahn, Market Street East, Philadelphia, Perspective of Civic Centre 'A "room" is for him a place with its particular character, its "spiritual aura", and a building is a "society of rooms. The street is "a room of agreement" and the city "an assembly of places vested with the care to uphold the sense of a way of life"' (Norberg- Schultz, 1980: 198). Source: <http://bombmagazine.org>

Frank Lloyd Wright can be seen as the most influential architect, especially for how he perceived spaces beyond their point in place. By exploding the traditional "box" he redefined the relationship between the exterior and interior, enabling man to 'experience a new sense of freedom and participation,' (Norberg- Schultz, 1980:194).

Mies Van Der Rohe's empty glass boxes were actually not empty at all, but 'provided the infrastructure for difference,' (Mertins, 2003 in FOA, 2003: 272). The recessive and loving neutrality enabled 'new kind of light- touch inhabitation,' (Alison and Peter Smithson in Mertins, 2003 in FOA, 2003: 272).

the pedagogical qualities of place are becoming more evident as they diminish due to the disrupted relationship between people and their surroundings.

The street and its dynamic qualities are becoming increasingly necessary in a world characterised by globalisation. In order to facilitate the rapid advancement of society it is the infrastructure for movement that needs to be reimagined. The infrastructure of transport changes the urban fabric and environmental conditions (Lemberg, 1997).

Streets, however, have become more complicated today. ‘They became the stage for spontaneous political vindication,’ (Gadanh, 2011: 2) and it is this quality that needs to be defined through the design of spaces.



Figure 3.26: Temporal Infrastructure. Virtual Bridge Design for ASA International Competition entry. ‘The New Basic’.
Source: Sketch by Author

CHAPTER 4

TRANSIENT ARCHITECTURE AS A PLATFORM FOR INTEGRATION

“ . . . we have a different idea of world class: low- tech, labour intensive, many- textured, articulate, connective, human- scale, orientated to everyone, wonderfully different and highly sensitive to the particularities of place.”

(Julian Cooke, 2015: 26)

4.2 SUSTAINABILITY IN SOLIDARITY AND INTEGRATION

4.2.1 Introduction

Sustainable interaction between different elements is essential for successful urban spaces to exist. An understanding of differences renders domination unattainable. Therefore, focusing on just one aspect of sustainability alone is unviable. The environment, technology and people need to become interdependent and interrelated.

4.2.2 The Shifting Dynamics of Cultures

‘The inaccessibility of Africa has always been its outstanding feature, and the greatest drawback to its development,’ (Varian, 1953: 31). It remained largely untouched by outsiders until colonial expansion. Once these spaces became accessible there was large competition between the ports, resulting in infrastructure being built rapidly with little attention given to its effects on the natural and social environment or its future sustainability.

Colonialism in Africa was essentially a result of commercial vocations or capitalist production (Freund, 2007). It restricted movements and trade of the ‘natives’ in order to open up space for larger and burgeoning economic exchange. This resulted in a society characterized by racism and a destruction of traditional cultures (Mistry, 2001).



Figure 4.2: World Map illustrating the divisions between different forms of colonisation specifically on the African Continent. Source: Sketch by Author

Heteroglossia is a concept that explains the co- existence of multiple cosmologies and systems of logic within cultural contexts. People who belong to different generations,

condition of ongoing, ceaseless flux where all is in motion,' (Bergson in Yates, 2009: 17), responding to sustainability issues not through form and function, but by its ability to adapt and respond to society and change.

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CHAPTER 5

SYNTHESISING SYSTEMS THROUGH MOVEMENT

*' . . the essence of the place will be informality—
nothing obligatory—anything goes. There will be
no permanent structures. Nothing is to last more
than ten years, some things not even ten days:
no concrete stadia, stained and cracking, no
legacy of noble contemporary architecture,
quickly dating. ...'*

(Joan Littlewood, "A Laboratory of Fun," 1961)

CHAPTER 6

THE DYNAMICS OF ISIPINGO WITH RESPECT TO MOVEMENT

*'Connections are productive. They exert a force
that acts on things and bodies. Cities are places
of thickening connections'*

(AbdouMaliq Simone, 2010: 137)

Isipingo Rail is serviced by taxis, made up of 15 Taxi Organisations under private ownership (Black Balance Projects, 2016), which have had the opportunity to develop unique networks to support the people of Isipingo and the surrounding townships, informal settlements and squatter camps. They bring in over 62 000 passengers a day. Being the main mode of motorized transport (Black Balance Projects, 2016), the infrastructure put in place to support these structures is poorly neglected and collaboration is non-existent, causing a volatile relationship between the state and the taxi organisations.

6.5.3 Analysing Existing Development Schemes

Development in Isipingo will have incalculable implications for the socio-economic situation, especially for informal trade, therefore careful problematizing needs to take place. The development plans set out by eThekweni Transport Authority (ETA, 2010) specifically state that the use of existing infrastructure and spaces are a high priority, yet the project in Reunion directly contradicts this.

Instead of using the existing CBD, an area in need of social rejuvenation and infrastructure maintenance, the proposal is to rezone Reunion as a commodified, intermodal transportation hub (IYER, 2011) and start from scratch in order to support development plans which have been set to commence in the unforeseeable future. The scheme is sold by iconising Reunion as the new 'entrance into Umlazi'. This is a proposal reflective of a Functionalist error, which only succeeded to support a minority while draining the dynamic networks of the majority.

Currently, the only proposed development for linking Isipingo with Durban's CBD is an upgrading of the rail, a mode of transport which only brings in 7000 passengers per day. When compared to the intensity of people moving via taxis, it is clear to see that priorities have either been misplaced or lay in corrupted pockets of the state. There has been no attempt to incorporate the area into the IRPTN plan or propose any bus depots and this is mainly because of the lack of interaction with taxi organisations.

CHAPTER 7

ANALYSIS: A MELTING POT OF CULTURES

*'Our slaves are robots: in the age of automation
all men can be free.'*

(Joan Littlewood, Fun Palace Document, 1964)

7.1 INTRODUCTION

Movement and place are inherently interdependent. In First World countries, such as Florence, movement is analysed as an economic and development issue. However, movement and connections across space and time have always been a survival technique for those in Third World places. Both perceptions are narrow, too focused on the present and the response is not interdisciplinary.

Economically and socially, movement is unsustainable in Isipingo because of the infrastructure put in place for its facilitation. Segregated pockets of veiled informality, resulting from the harsh barriers formed by movement, are romanticised to be resilient; however, a narcotic society is silently taking over and is destroying imperative connections necessary for survival.

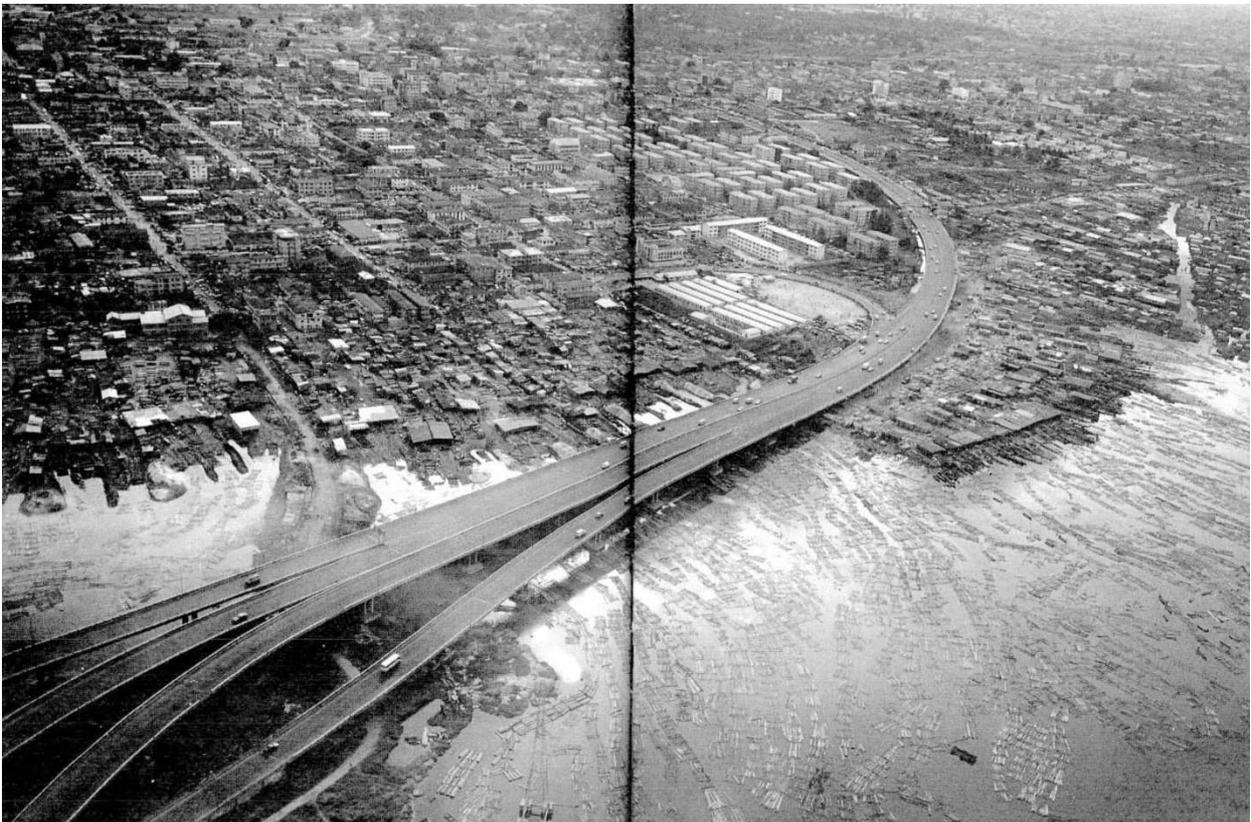


Figure 7.1: Movement in African Cities. Source: Koolhaas, 2000

7.2.2 MOVEMENT AND PLACE

7.2.1 Introduction

Without movement, place would have no meaning. Therefore, controlling movement through space has a hegemonic hold over place. In a society radically affected by

technological innovation and automation, perception of time and movement has adapted too fast for the design of these spaces to be sustainably problematized; however, first and third world countries have realised the economic value of these spaces and have responded in ways that are phenomenally similar.

7.2.2 First World Progress

Cedric Price (2005) visualised place as a temporal experience, explaining his inclination to perceive architecture and technology as improvisational. At a time of rapid transformation, any kind of structure that was static or characterised by permanence was a social asphyxiator.

His ideas surrounding architecture responded to the excess of time resulting from the development of automation (Mathews, 2005), coinciding with a time period characterised by drug abuse and psychological distress. In order to alleviate this issue, temporal places of autonomy needed to exist to encapsulate excess of leisure time. Unfortunately, his ideas were distorted by controlling social engineers and they were never brought into reality (Mathews, 2005).

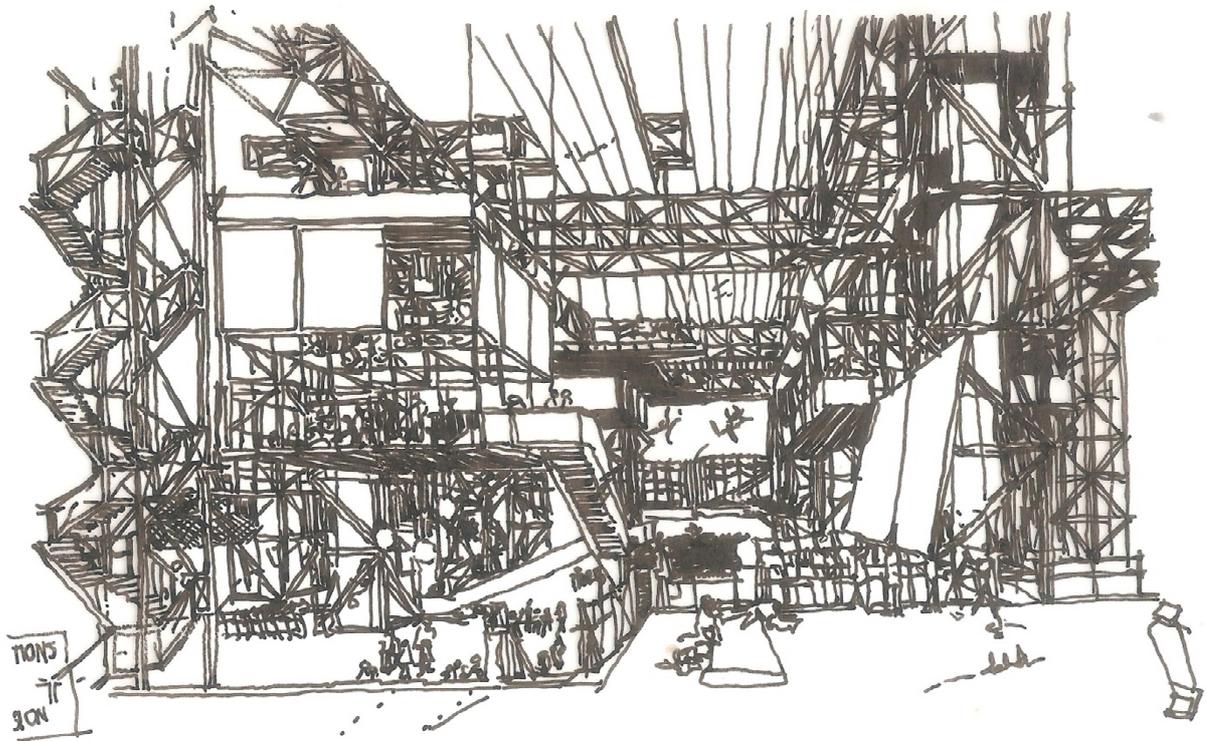


Figure 7.2: Sketch of Cedric Price's Fun Palace Source: Sketch by Author from Mathews, 2006: 39

In South Africa, however, informality is confined to the periphery, disconnected from global dynamics. The informal settlements are characterised by high levels of unemployment, poverty and crime (Odendaal, 2003) causing people to resort to gangs and drug abuse in order to survive (Goodenough, 2006). Development plans are idealised and don't consider local connections on which the majorities survival depends on, destroying not only cultural dynamics, but identities connected to place.

Globally, developers do not have a consistent and acceptable answer of how to treat these informal settlements as each one is different from the other, negating the idea of a universal answer (Myers, 2011).

7.2.4 Conclusion

European and African countries, although different in cultural dynamics, are experiencing the same issues when it comes to development and that is the disconnection between the movement and time. Price and Simone, although influenced from two different worlds, both consider the imperative connection between people and infrastructure. By combining two thoughts across place and time, architecture to reconnect movement and place can be established.

7.3 THE DISCONNECTION BETWEEN LEVELS

7.3.1 Introduction

The National Development Plan for South Africa, funded by the president's office is met with much contestation throughout the country by civil society; however, it is particularly bad in Durban. Where Cape Town and Johannesburg started designing and implementing connections, Durban tried to perfect the system before initiating any kind of change, leaving communities in a liminal state of expectation and disappointment.

This kind of practice is not only causing conflict between levels, but internal issues between different departments and within communities and organisations.

7.3.2 Top- down Scepticism

EThekweni Transport Authority (ETA) is observed by professionals to be the superior department in relation to the more practical City Fleet, causing conflict not only between disciplines but between different modes of movement.

Therefore, processes to pass development proposals or plans are extremely complicated and most of the time the planners themselves are ignorant of the

Durban City as well as to Umlazi and surrounding settlements, causing for multiple cultures to move through the area on a daily basis.

The congested street has enabled it to be utilized by pedestrians and taxis simultaneously because the speed of movement is so similar. This forms a unique interaction between modes of movement.

Movement and temporality characterise the CBD. The traders moving in and out every day give a sense of unpredictability to the area as nothing seems fixed or permanent.

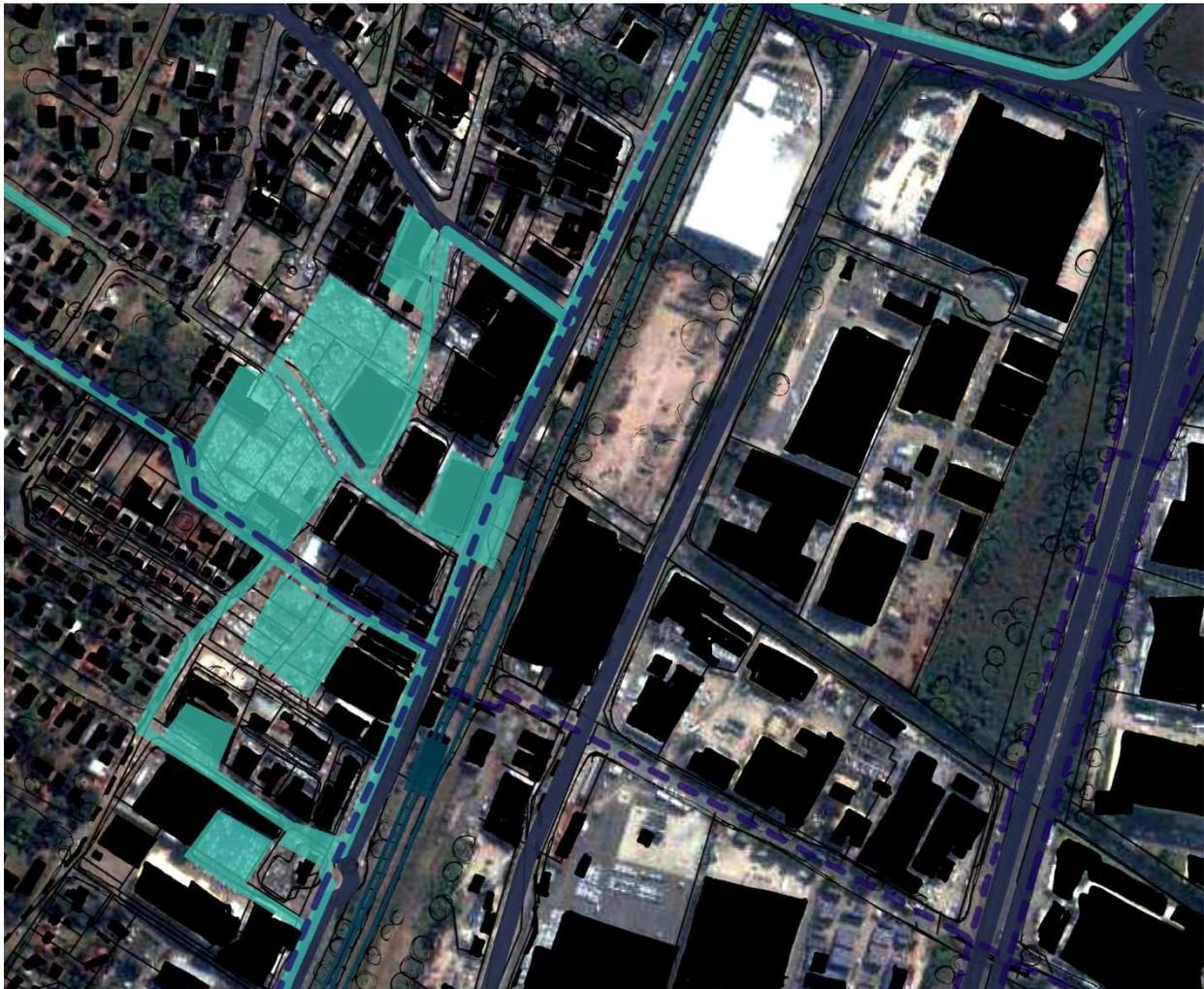


Figure 7.7: Contextual Analysis of Isipingo CBD. Source: Image by Author

However, this constant transition results in a lack of pride and respect for the place. The community amalgamating from various places gives Isipingo its identity, not vice versa.

7.4.3 Romanticized Informality

Although it at first seems chaos, unstructured and dirty, Isipingo has a unique network and community that has formed a structure within itself based directly on survival

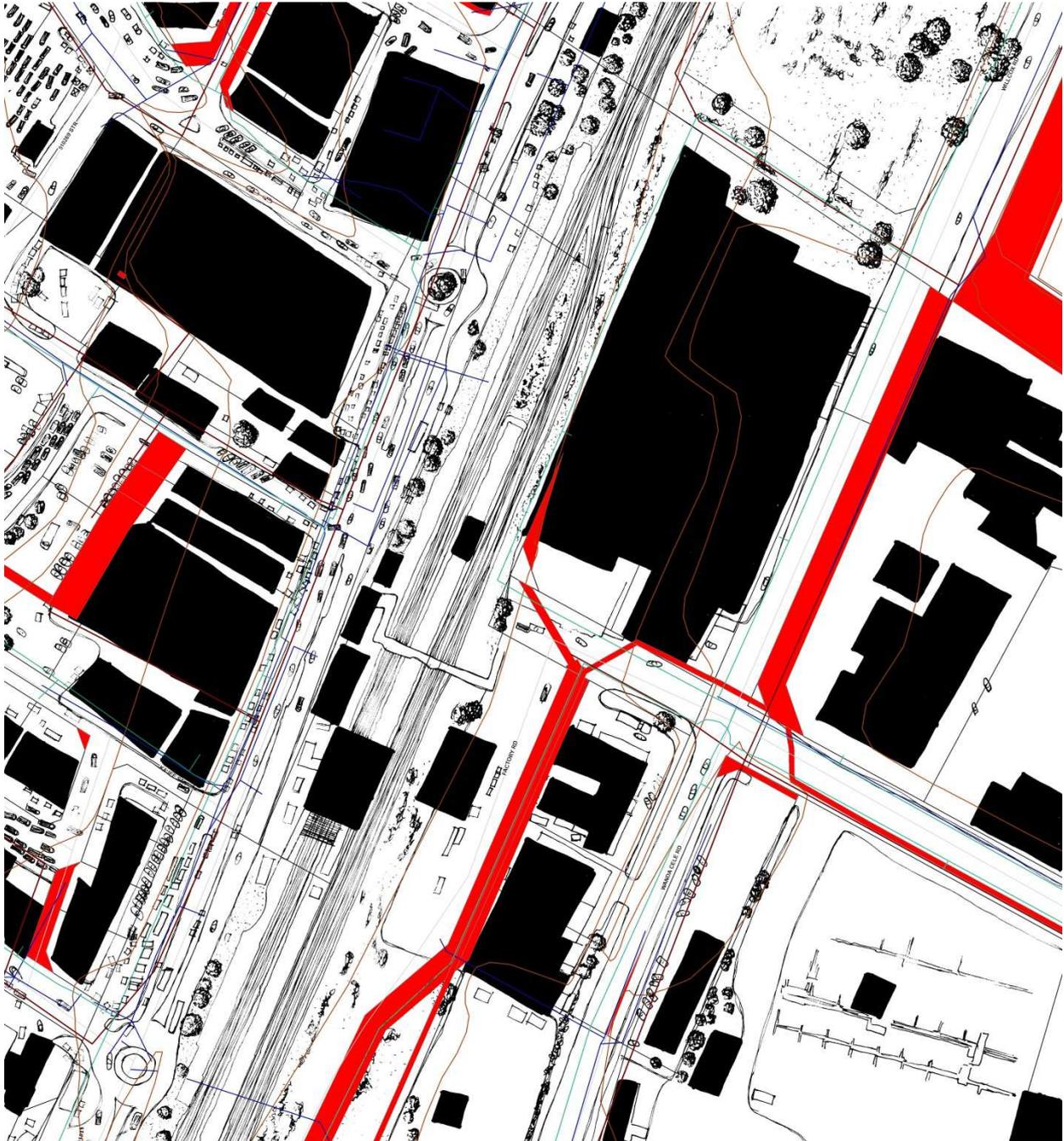


Figure 7.8: The congested street layout of the CBD. Source: Image by Author

needs. The Masibambisane Traders Organisation is the only form of establishment keeping order. The Business Support Unit in Isipingo keeps within their fence.

Although the close knit community does not seem unnecessarily unhappy in the vibrant market place, an increasing population- caused by forced removals to areas surrounding Isipingo- are causing socio- economic issues including unemployment specifically regarding the youth and a congested market place.

Traders are literally unable to move from their station because there is no more pavement space. Therefore, if something were to hinder a specific trading space, that trader would be unable to trade and unable to do anything about it.

Traders experience numerous issues, specifically regarding the environment. There is no infrastructure put in place to assist informal trade and often the market is swept through with blinding dust from harsh winds.

Being a transitional zone, there is little investment in public space and no place for cultural activities. Therefore, with regards to the high level of unemployment and peak traffic hours, people in Isipingo generally have excess time on their hands. This has led to an intensive drug problem in the area; locals refer to them as 'Whoonga Boys'.

Children are generally left at home by the traders and women do not walk alone in the CBD. This also prevents traders from staying overnight in the CBD increasing transportation and storage costs.

7.4.4 Conclusion

Although the infrastructure in Isipingo is in desperate need of attention, those who have places to trade in the area are still afraid of external parties intervening. One slight change to the system and many lives can be detrimentally affected. Because of this inability to change, Isipingo, although a transitional zone, does not support transformation and movement across time.

7.5 CONCLUSION

Through an architecture that is not only informed by movement and connections between people, but can adapt as these motions change over time, a multiplicity of cultures and dynamics are able to be accepted in a space simultaneously.

Infrastructure which allows for choice gives people the freedom to transform through space and time. Without this transformation, development cannot take place.

The biggest issue regarding development plans is negotiations and integration between the formal and informal sectors, whether it being stakeholders, trade or transportation modes; integration referring to the sharing of space to mutually benefit one another.

In Isipingo, a huge opportunity lies to show how the fair facilitation of movement can bring about urban regeneration and cultural cohesion.

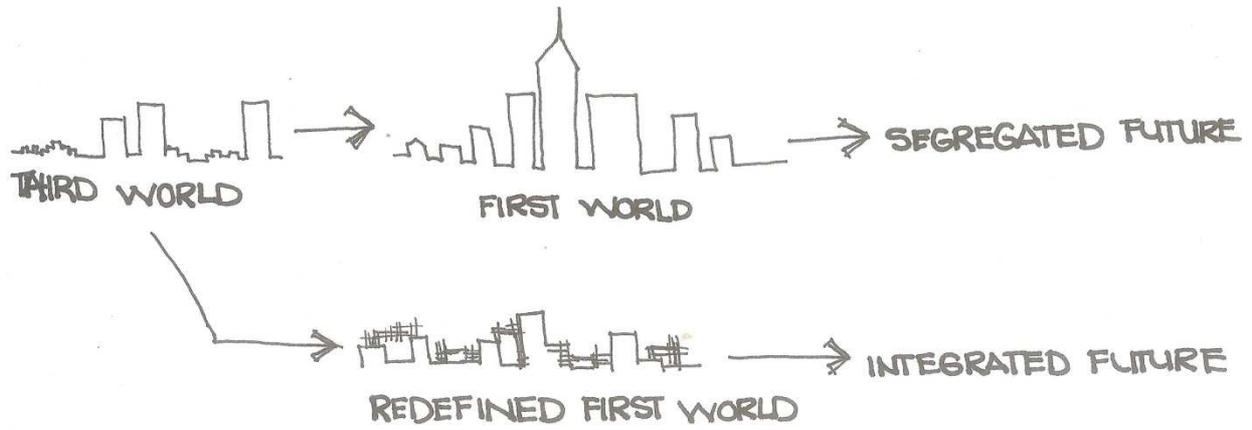


Figure 7.9: The opportunity Third World countries have through analysing the consequences of First World development schemes and choosing an alternative path to not only create an integrated future, but hurdle in front of First World countries by redefining interaction with place. Source: Sketch by Author

CHAPTER 8

CONCLUSION AND RECOMMENDATIONS

'There is no reason why we have to try and copy the fashionable brand of the so-called world-class city, which is often high-tech, factory-made, glossy, seductive, narcissistic, inscrutable, corporate, orientated to the rich, tediously the same and destructive of place.

We should be aiming for and persuading those in government, as well as the corporate community and civil society that we have a different idea of world-class'

(Julian Cooke, 2015: 26)

on people's perception of movement and the effects of time on place, it is impossible to simply focus on one aspect. Perception and culture is affected by a multiplicity of programs and systems and ignoring one aspect could have thwarted conclusions. However, future research on specific types of movement and relationships would enhance the argument and justify conclusions made. This could include research into taxi dynamics and problematizing these informal transportation, the effects of transmigration on cities and on homelands and the spatial boundaries between residents and place of people in close proximity to industrial zones.

APPENDICES

I. RESEARCH NOTES

i.a Informal discussions with Isipingo Informal Traders

Informal Discussions were conducted with Traders to not only understand their interaction with movement and how transport infrastructure affects their place of work, but how the socio- economic situation in Isipingo affects their daily lives and what deficient services can be highlighted and improved.

Participant 1

- A chairperson for the Masibambisane Traders Organisation in Isipingo
- An informal trader
- Without consultation, a building began renovations last year May, to the detriment of his business. No safety precautions taken during construction. Trader had to put up barriers to prevent pedestrians from walking under construction workers throwing bricks across walkway (no building inspectors). The truck parked along pavement forces pedestrians to walk around on the street causing congestion. The building is hardly finished
- There have been no accidents yet, but pedestrians walking in the street is dangerous
- The wall he and two other traders used to use was demolished without consultation because the construction company needed more space for storage. Trader tried to move but because of the congestion in Isipingo there is little space for him and moving too far takes him out of his network causing him to lose buyers. As it is, he is battling to meet his expenses. There has been no form of compensation from the construction company.
- He says that the increase in pedestrians is because of the newly developed squatter camps from Illovo as a result of relocations because of RDP houses going up.
- He says the Business Support Unit (BSU) in Isipingo is useless and they never see officials

Participant 2

- From Umlazi Section A
- Travels by Taxi- R20
- Sells lime, lotions, herbs etc.
- She thinks that the current state of Isipingo is not working
- She received no consultation on development plans
- Complains about the lack of housing and shelter against wind and rain- she is exposed
- She has a young son who stays at home
- Does not need to cross highway
- No access to water (have to buy from shops) or toilets

Participant 3

- Works for Pick n Win handing out flyers (R50 per day from 8-5)
- Literally works on the street- no space on pavement because of construction site
- Pays R9.50 for taxi from Umlazi section D
- Complains about the water in the gutter from burst and leaking pipes (it sits there every day- full of litter and smells bad) Traders have to sit in this water to trade)

Participant 4

- Comes from Tanzania and travels by taxi
- He fixes things
- He is not bothered by Isipingo's state- suits him and his business
- He does not have a permit
- Wary of change

Participant 5

- Trader from Mtubatuba but lives in Umlazi (goes home once a month) and travels by taxi- costs R140 (to go home)
- Complains about the lack of recreational opportunities. They have too much free time on their hands and places for music and performances would stop people from using drugs in his opinion

i.b Observations on Isipingo

- Isipingo Street- Old Main Road- is split into 3 sections- C,B and A. Only traders in section C who utilise trader shelters or predominant paver space trade with permits. Traders from the other sections don't have permits because of limited space and lack of any form of formal management- too far away from BSU
- Metro Police are active in the area. However there is little regulation over what happens with traders and Metro ignores these issues- they do check vehicle registrations- a few traders own their own vehicles.
- Most traders do not seem to be aware of current development plans for the area. They are happy with current conditions- a few minor complaints- but they are not hassled by police or officials and are left to make their own rules and regulations- Third Space in reality. They are wary of changes as this could affect their lifestyles.
- Although it at first seems chaos and unstructured and dirty, Isipingo has a unique network and community that has formed a structure within itself based directly on their needs. There is little tension in the area and everyone seems to know everyone. People do not seem unnecessarily unhappy and the vibe in the market is reflective of good attitudes
- Most traders are aware of the increasingly bad Whoonga situation, warning me to not walk alone as women should not walk alone through the area. Users and dealers carry big knives and frequently attack pedestrians.
- When the wind blows the flat and littered area becomes an extremely harsh environment because of dust and the direction of the grid causing channels for the wind- it becomes hard to escape.
- Traders children tend to remain at home- there are no children wandering alone (unlike Warwick)

i.c Semi- Formal Interviews with Professionals

Discussions with Professionals involved in the development plans for eThekweni Municipality were directed towards enabling an understanding of their role in the plans and, more importantly, their personal views and understanding of the situation. Leader questions were as follows:

- What are your perceptions of Isipingo in relation to the rest of the eThekweni?
- What is your personal opinion on current development schemes?

- How do you feel about the outcomes of the projects you have done for the Municipality?
- What is your perception of how transport is handled in South Africa?
- What measures have been taken to ensure co-operation with taxi organisations? And are these strategies resulting in positive outcomes?
- Do professionals utilise the public transport system?
- What is your view on the spatial revolution and transport infrastructures role in it?

Participant 1

- Architect working on the scheme for Reunion, Isipingo
- Conflict with distances between the national treasury and urban planner (200m vs 50m)- to promote commercial activity
- External researchers are sent to gather research because of the area being so volatile. The designers themselves are more involved on the contractual side of the development instead of the social aspects
- Neglect of the connection between the south coast and Durban in the IRPTN plans in Durban as they only plan to update the railway

Participant 2

- PRASA Manager
- PRASA- people public transportation (they focus on railway and C2 corridor). People often confuse with Transnet which is predominantly freight. PRASA and Transnet plans are still integrated.
- Integrated with government plans for bus routes- feeder routes.
- Identified Isipingo as one of the main intersections and busiest hubs- an intermodal development- focus on retail development (community in Isipingo is very unique specifically regarding retail and economy- people will travel miles just to buy something specific)
- Focused on Station Modernisation – bring in new technologies to improve the system- not just upgrading existing infrastructure.

Participant 3

- Durban Architect

- Architects have a more holistic view than other professionals in the built environment industry. They are risk takers and consider the social response to places (how people use spaces).
- Plans are dominated by traffic engineers with the different departments separated into different silos with little communication. Architects can be used to solve this as the architect is involved in all aspects of construction and planning.
- All modes of movement needs to be linked in Isipingo (currently segregated)
- Approach a design problem in an arithmetic way (learn the facts and how the thing functions- movement patterns and intensity). The psychological affects come after (heights, stairs- disconnection between top floors and ground floor)
- Has used public transport but prefers Cape Town's transport system- is more regular. In Durban the buses never arrive and the train is cheaper. Is against the idea of Uber because it is privatising public transportation
- Durban is disaggregated and requires an integrated rapid transport system which connects the CBD, South Coast Road, Isipingo and Amanzimtoti (is for the idea of a corridor city in South Africa)
- Considers the Reunion scheme a money making plan which is going to drain the CBD in Isipingo. Because there is nothing there they change the zoning and offers up opportunities to buy land and develop new projects instead of utilizing and upgrading an already existing Urban Node.
- Our built environment in Durban is determined by our topography
- He remembers Isipingo being immensely populated with Indians and is shocked to hear that this is no longer the case.
- Considers the DOP unnecessary but acknowledges that it will benefit Durban by moving freight out of the city
- Comments on the lack of parking spaces in the city- higher class people don't go into Warwick because there is no parking space and the promenade is so successful because there is parking

Participant 4

- Architect involved in the Transport Interchange in Bridge City
- The city is fragmented- departments don't talk to each other and it doesn't work for the integrated development plans.

- His main issue with the development plans are the collaboration between the BRT Routes and Depos and the Feeder Services. There are two systems set out by ETA (for BRT and Rail) and they do not gel together.
- ETA is responsible for transportation and they come up with the strategies and systems. BRT design and routes are driven by traffic engineers who don't take into account the spatial or social implications of their lines that they crudely draw. ETA has a lot of unresolved issues and are not capable of making deadlines. Their projects are too big and they take too much time to complete. By the time the project is almost done the entire political agenda has changed.
- No integration with Taxis. There are two possible thoughts that have still not been decided on. One is that the taxis will be integrated in the public transport system and receive compensation up front for 'surrendering' their services to the city. The people will still be employed and the taxi organizations become shareholders in the transport system. This is taxi recapitalization based off a South American Model. It has been implemented in Johannesburg and is currently successful, but in Durban there is no agreement. The idea is to create a more regulated and safer public transport system using taxis, but the organizations are refusing to work with the city. Therefore, there has been no decision on which model to implement in Durban. The second thought is that the taxi organizations will simply disappear once the buses and rail take over
- He thinks that the South Coast has had no attention paid to it. There are no plans that he is aware of to extend the BRT Route down the South and into Umlazi. The area hasn't been thoroughly analysed. The only plans are to upgrade the existing rail. Believes that in the long term plan this is a better system as it is cheaper and more efficient and can move more people, but for it to be successful, specifically down the south coast a completer overdo of the entire system is required (simply upgrading the service is not enough)
- His current project, Bridge City, is way behind its timeline. He complains that it is not functioning well because the feeder systems do not function. The development (which was supposed to be completed 2018) has been slow and is still under transition and is too early to give an analysis of the effects of the development. In 10 years the only thing to have been developed is a private and public hospital, a magistrate court and a mixed use development above the mall above the station. The mall is supported by pedestrian movement because the

feeder services do not support the rail so the railway under the mall does little to bring in any revenue to benefit the mall (it is an expense). There are new developments for Bridge city which requires moving the taxi rank to gain a 200m movement route between the rank and the bus depo. This is part of National Treasury's scheme to generate business opportunities by creating long movement corridors between interchanges. Complains that by the time all the development plans and ideas are approved it will be a year before they can start changes (takes longer for plans to get approved than it does to develop the plans)

- The city is so scared of what the effects of development plans will have on communities that they take forever to implement them, not realizing that the waiting for the development to take place has a worse effect.
- National Treasury and planners often disagree on how to generate movement. Complains that National Treasury's plans are too rigid and academic and don't consider the context. Different solutions work for different sites but they stick too rigidly to their policies that it is almost impossible to change their minds. In principle the system works and a lot of their ideas are good. They have become a political access point for architects and urban planners to make the government think of problems in term of spatial design. He believes that design needs to take place at a political level to take into account social issues and architectural icons, but he doesn't believe that National Treasury is the right department to do this as they are practically the government's bank. There is currently no department that deals with spatial planning or the built environment besides Public Works and Human Settlements. That's how he thinks the Integrated Spatial Revolution will be solved as there was no talk about HOW they were going to achieve this.

Participant 5

- Works on the bus depots in Rossburgh (standalone station which will have little effect on other areas) and Umtumzumi (a feeder depo for Bridge City- wants to become the main depo while Bridge City is being completed, but this is another example of National Treasury's context issue- Buses connect between Alice Street in Warwick therefore whatever happens here will have a direct affect in Warwick)

- They are currently at the analysing stage and figuring out if it is viable.
- The city's timelines do not work with planners. There are always monetary issues and land use dilemmas with the city (Alice street is a perfect example of too many developments cramped into one area)- everyone is running on different lines
- Development plans are taking too long. There are too many politics involved and the processes are too complicated. The planners don't even understand what's going on. Even the City Fleet do not have all the answers. It is definitely NOT INTEGRATED.

Participant 6

- Architect working on a Bus Depo in Umlazi amongst other urban design schemes throughout Durban.
- Has travelled throughout Southern Africa and developed an interest in the dynamics of informal trade. Is amazed at how rapidly it changed because of globalisation and rapid technological advancement.
- Started work with Rodney Harber when he came back to South Africa on Mansel Road where they developed a trading/ living units for informal traders (mostly woman from extremely rural areas) coming once a month to trade and buy. They originally lived on the buses they arrived in before shelters were provided for them. Trading in this area happens from 10 at night until 2 in the morning
- Claims that there will be a 10- 15 year delay on the BRT in Durban because of the negotiation between taxis and buses. The IRPTN plan in Durban is really the BRT plan because there is no other focus and it is not integrated.
- The NDP is funded by the president's office and is in charge of the development plans overall. They have a SIP7/8 section in their plans for transport and these funds they give directly to Metro (not eThekweni). Capetown and Johannesburg started plans by designing the route and initiating construction, which is why they are so much more advanced in development of BRT. Durban decided to focus on the system and perfecting that before initiating any kind of change and that is why nothing has started happening (maybe one big plan is overwhelming to the people and that is why they are so against it, incremental change works better).

- City Fleet are the bus managers in Durban and Umlazi. Buses run from 4:30a.m. – 2:00a.m., making it an almost 24hour bus service. The Bus Depos are therefore active for almost 24 hours.
- Buses are not flexible. Taxis are and this is why buses will never replace the taxis.
- The Isipingo bus company is slowly shutting down and workers are not being paid. When they strike they actually block the road leading out of Umlazi, making it impossible for people to leave or come in.
- There is no communication between ETA and City Fleet. ETA considers themselves superior to the more practical and realistic City Fleet and arrange these grand plans with no sharing or negotiation with City Fleet. He thinks that I will probably know more about what ETA plan to do than City Fleet.
- The C2 corridor is mostly rail. Rail only runs at certain times and therefore bus routes are needed but nothing has been planned.
- PRASA and other companies involved do not speak to each other about plans. They try to outdo other sectors so that plans can go the way they want them to go in a manner that is more profitable to them.

II. ETHICAL CLEARANCE APPROVAL



20 April 2016

Ms Ayla Lyn Harvey 211503279
School of Built Environment and Development Studies
Howard College Campus

Dear Ms Harvey

Protocol reference number: HSS/0359/016M

Project Title: **Movement as a Generator for Transient Architecture: Towards a design of a Transport Interchange in South Durban**

Full Approval – Expedited Application

In response to your application received 06 April 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisor: Mr Majahamahle Mthethwa
Cc Academic Leader Research: Dr Cathy Sutherland
Cc School Administrator: Ms Nolundi Mzolo

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Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville

III. SUPERVISOR'S REPORT

NOTE: Senate decision April 2008: The Supervisor's report should not be sent to the examiners but must be retained in the student's file and made available to the coordinating examiner(s) when the coordinating examination is done.

College of Humanities

Supervisor's Report

Candidate: _____ Student Number: _____

Research Coursework

Degree: _____

Supervisor: _____

Co-Supervisor: _____

Dissertation Title: _____

The Supervisor is required to provide a non evaluative response to the following:

1. The duration of the project and its supervision: when it was first registered and when the supervision began:
2. Resource constraints or opportunities that impacted on the research.
3. The extent to which the collection of data, the solution of problems, deductions and critical discussion result from the candidate's own efforts, or from discussion between the candidate and the Supervisor:
4. Whether the supervisor has seen and approved of the entire final draft of the dissertation:
5. In the case of a Coursework Masters, the percentage of coursework required of the candidate for the degree in question:
6. Conference attendance and publications emanating from the work:
7. Additional modules/training courses attended:
8. Whether the supervisor is satisfied that, to the best of his/her knowledge, there is no plagiarism in the dissertation

Signatures of:

Supervisor: _____

Co-Supervisor: _____

Date: _____

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PART TWO

DESIGN REPORT

CHAPTER 1

INTRODUCTION

experience more violence in public spaces, women are more fearful of the potential crime and according to the UN- HABITAT, this drastically limits their socioeconomic opportunities and access to city services.

1.1.3 Approach

The investigation focuses on experiencing the space through the mobile user's perspective and how their movement forms interconnecting networks across space and time. In order to create a liveable and sustainable city, these interacting forces need to be identified, understood and worked with congruently.

Therefore, participatory planning is the approach taken to interact in a constantly shifting and dynamic place. However, the networks are impossible to fully understand unless it is an everyday practice, and even then only a section of the network is able to be perceived. Therefore, neutral frameworks which can accommodate for the transient nature of the space are needed to not only enable a change in function over time, but to enable the user to become the architect of his own space.

1.2 PROJECT DESCRIPTION

1.2.1 Urban Design Project: Long Term Large Scale Intervention

- Integrating the South Durban Basin into the larger IRPTN plan for eThekweni, connecting Isipingo and surrounding areas with Durban City
- Interactive connections across segregated zoning, integrating industrial and social services

1.2.2 Transport Interchange: Medium Scale Intervention

- Dynamic movement networks that increase the expanse of choice
- A public space to improve the socio- economic situation in Isipingo CBD through sports and culture
- Infrastructure which supports informal trade and accommodation for women and children within the CBD

1.3 CLIENT: NATIONAL TREASURY

1.3.1 Background Information

National Treasury is a department of the South African government responsible for managing all national economic policies, budgets and finances; therefore, they are responsible for funding the National Development Plan for the country.

They basically want a seamless movement network connecting areas of opportunity to attract public and private community to uplift the local economy and social environment leading to a larger sustainable city. They propose to solve spatial inequality through an Urban Networks Strategy through the Neighbourhood Development Programme (NDP), by attracting investment at strategic locations, i.e. Urban Hubs, connected by high order public transport links connecting periphery nodes to the CBD

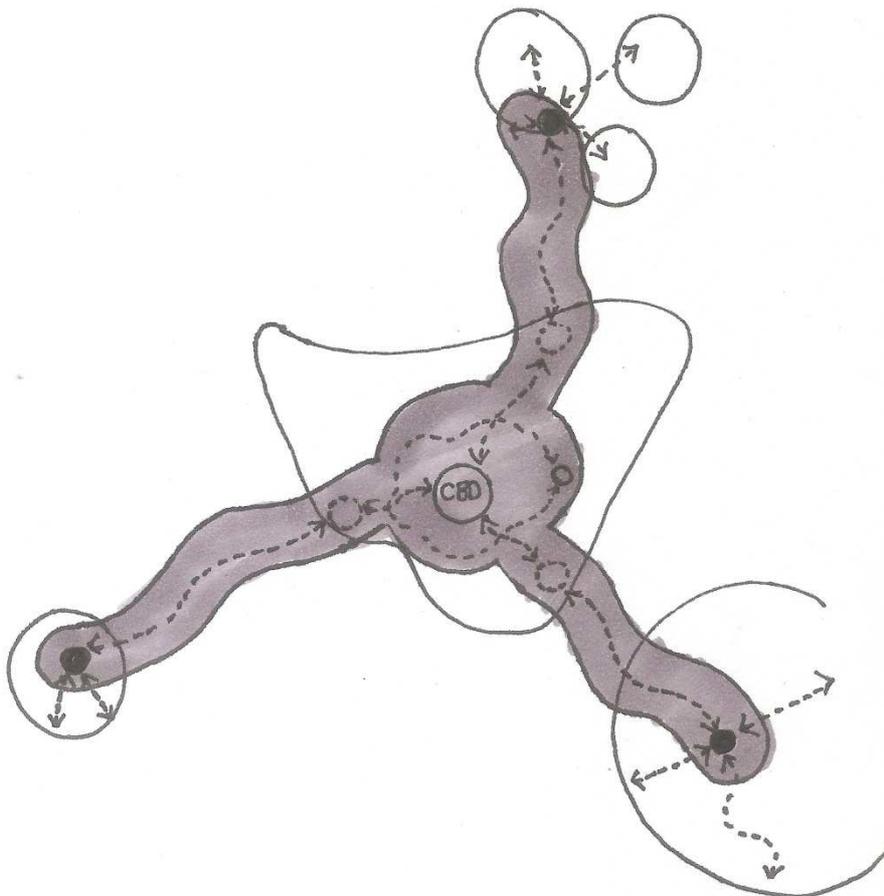


Figure 1.2: National Treasury Development Concept. Source: Sketch by Author

CHAPTER 2

ISIPINGO ANALYSIS

2.4 CONCLUSION

The CBD in Isipingo is littered with a number of socio- economic issues; however, these issues come down to three main stakeholders

- Accessibility
- Choice
- Marginalisation

Through a transient architecture accommodating for the dynamic cultures moving through the space, not only can a platform for integration be formed, but recognition and respect for the opportunities that Isipingo offers can be attained.

CHAPTER 3

DESIGN DEVELOPMENT AND RESOLUTION

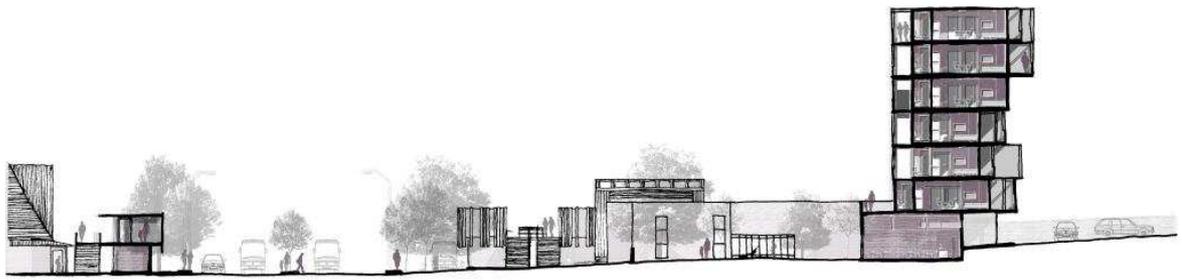


Figure 3.25: Section B-B

3.4 TECHNICAL DETAILS



Figure 3.30: Strip Section through Residential Units

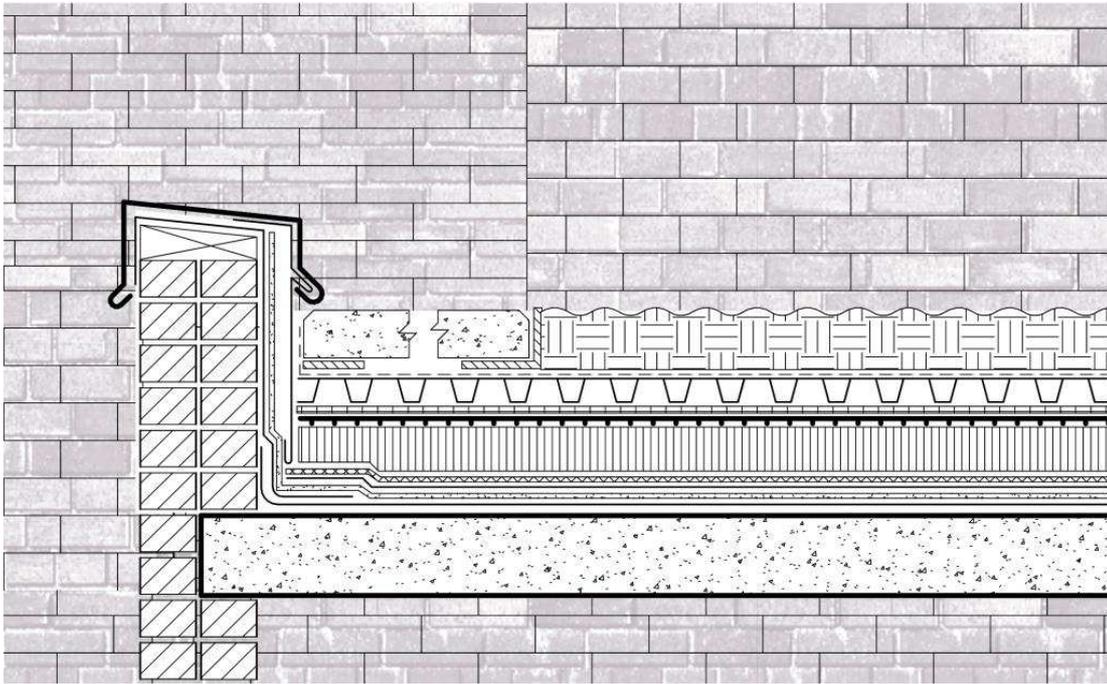


Figure 3.31: Green Roof

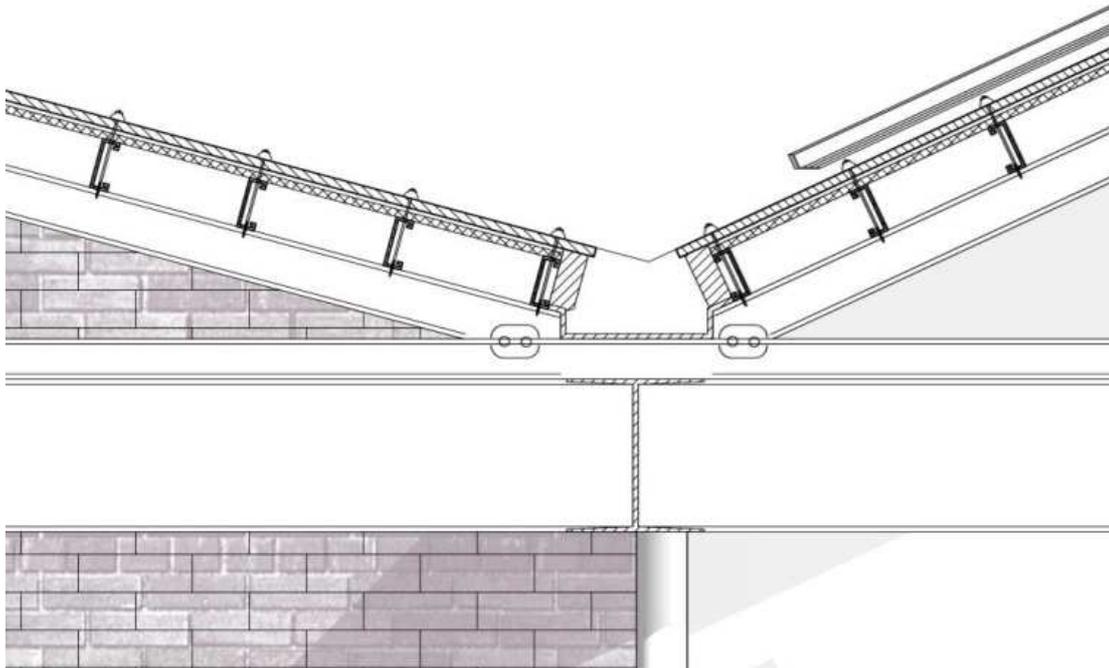


Figure 3.32: Butterfly Roof

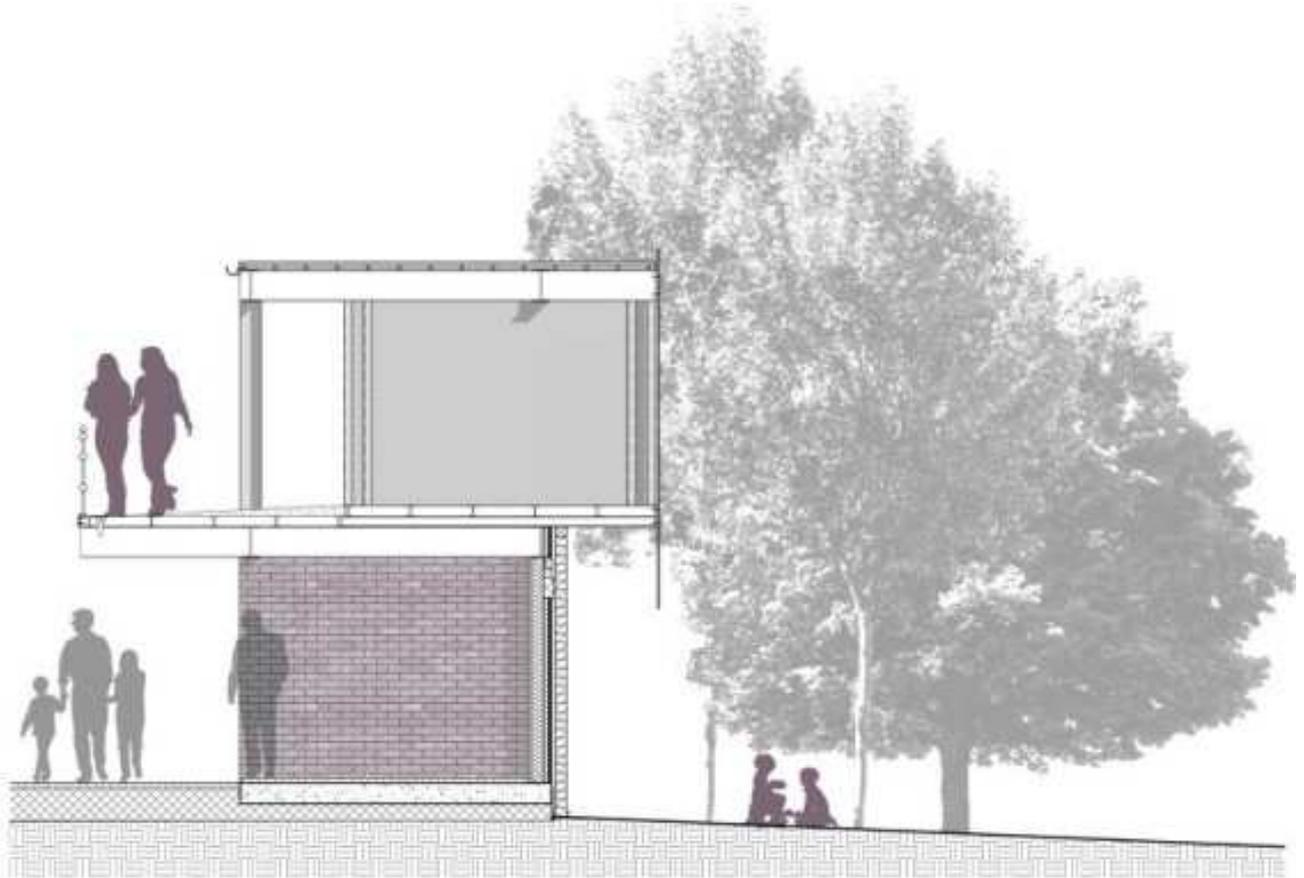


Figure 3.33: Retail Space Detail



Figure 3.34: Unit Plan Detail

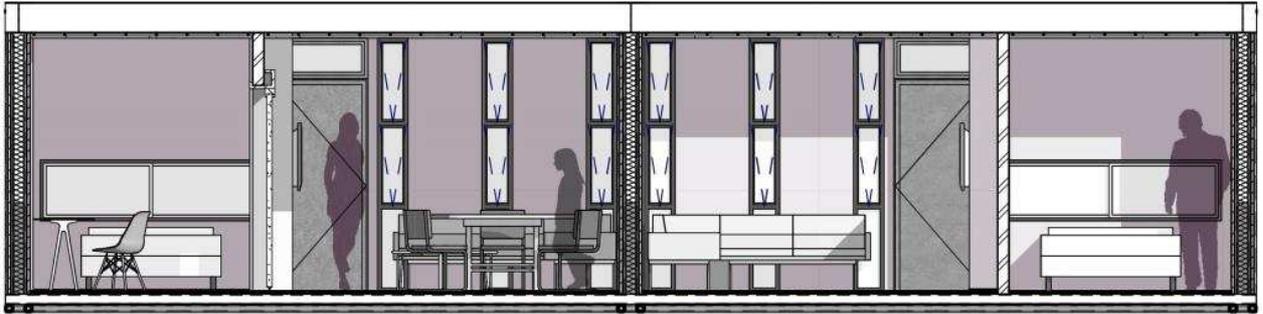


Figure 3.35: Unit Detail 1

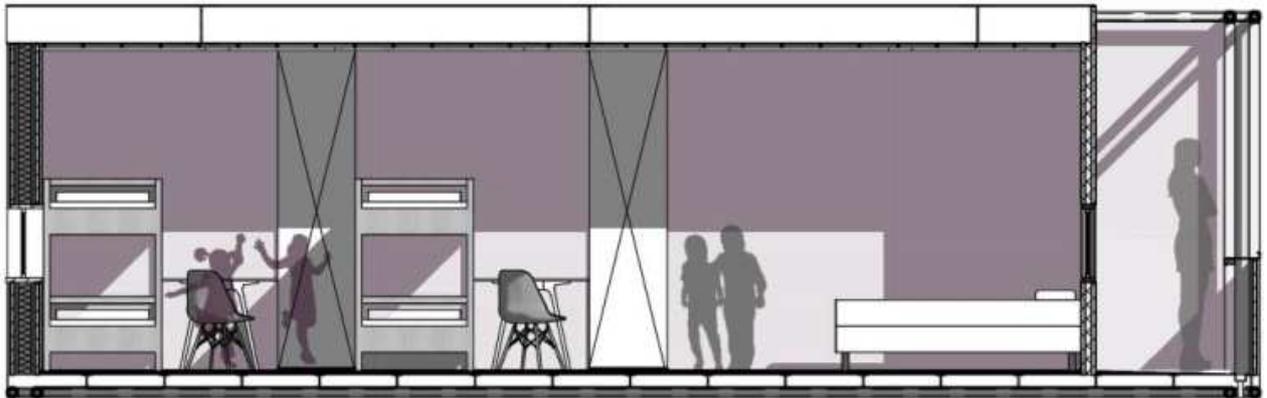


Figure 3.36: Unit Detail 2

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